

**Proceedings
of the
Western Regional Conference
on
THE VISUALLY HANDICAPPED CHILD
WHO FUNCTIONS ON A RETARDED LEVEL**

June 1971



AMERICAN FOUNDATION FOR THE BLIND
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THE VISUALLY HANDICAPPED CHILD
WHO FUNCTIONS ON A RETARDED LEVEL

San Franciscan Hotel
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San Francisco, California

June 10, 11 and 12, 1971

American Foundation for the Blind, Inc.
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PREFACE

The incidence of multiple impairment among children who are visually handicapped is noticeably higher today than it was two decades ago. Among the additional handicapping conditions accompanying blindness, as reported in population samplings, is retarded development. These proceedings of the Western Regional Conference on the Visually Handicapped Child Who Functions on a Retarded Level held in San Francisco, California, June 10-12, 1971 are being published in an effort to create a better understanding of the special needs of these children and to disseminate information in regard to various methods of intervention and remediation.

The phrase "functioning on a retarded level" is used with purpose. Retarded development does not necessarily have an organic or genetic basis. Other factors are recognized as influencing development such as parental attitudes toward blindness, parent-child relationships, concept of self, and experiential and emotional deprivation. Often these factors are so complex and the child's behavior so baffling as to preclude an accurate evaluation of a child's potential even by most experienced professional persons using the best of the existing evaluative instruments. Complicating the evaluation process are the meagerness of these valid test instruments, the often deceptive appearance of the visually handicapped child, and the presence of types of behavior which when observed in the sighted child may mean mental retardation or abnormality.

The theme "Today's Environment for Living and Learning" which permeated all the sessions was suggested by discussions concerning the child and his family held at the White House Conference on Children (Washington, D.C., December 1970). It will be noted in these proceedings that stress was placed on varieties of environment which may foster a child's optimum development. A child's family and home normally provide his early environment for living and learning. As a child grows, the "family," as an agent affecting his learning, may be, in a broad sense, the group of which he is a part in a day or residential setting. Attention was drawn in this conference, also, to the needs of youth and young adults for whom opportunities and resources for satisfying living are still limited.

There is currently resurgent interest in early childhood education for all children, and especially for those who experience some deprivation in one form or another. Model programs based on different learning theories are becoming more numerous, and intervention methods are reaching down

even to infants. One of the highlights of this conference was a live demonstration of intervention techniques with infants who are blind. Teaching methods and materials were also shown with pre-school children who are multiply impaired. Unfortunately, the responsiveness of the babies and older children in this presentation, as well as the appreciation of the conferees, defy adequate reporting in this publication.

The conference was arranged by the American Foundation for the Blind with the assistance of a planning committee representing various services to young children and their families in the western states. There was a great interest in the problem and an earnest desire on the part of agencies to cooperate in this project. We wish to take this opportunity to thank all those who so generously shared their thinking and gave their time and energy to the planning of, and participation in, the conference.

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I. AN OVERVIEW

Chairman: Everett Wilcox, Ed.D., Superintendent
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Maximizing Potentiality Development--A Humanistic Approach

Speaker: Galen W. Dodge, Ed.D., Executive Director
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Several decades ago, William James, who is considered the grandfather of American psychologists, estimated that human beings use approximately ten percent of their potential. Countless exhaustive studies have shown quite demonstrably the extent to which any combination of intervening variables such as deprivation, mental and/or physical impairment can depress an individual's level of functioning far below the James' estimate. For the most part, we have done a yeoman's job in identifying and describing the characteristics not only of the visually handicapped child, but of all types of children who function below anticipated level of performance.

A few weeks ago, I had the pleasure of having lunch with the superintendent of our Nebraska School for the Visually Handicapped in conjunction with designing and implementing a developmental appraisal process for the staff and students at his school. More specifically, we were discussing ways in which our research project could promote a climate for positive staff and student growth. During our discussion, he related how one of his legally blind students with approximately average intelligence was performing at the anticipated level of expectancy, while another child with similar characteristics was operating far below what might be expected. It was his observation that perhaps research studies directed toward the identification of the characteristics and especially the related input factors of blind children who are operating at expected levels of performance could provide valuable clues concerning the best type of climate for maximizing human potentiality.

It is rather uncanny that the superintendent of our Nebraska School for the Visually Handicapped was touching upon the theme of my address--opening this conference sponsored by the American Foundation for the Blind--a theme which Pauline Moor and I arranged months prior to my visit with the superintendent.

For the past twenty-two years at the Nebraska Human Resources Foundation we have been attempting to discover the conditions that maximize human potentiality. Our hypothesis has been

simple and straightforward. Simply stated, it has been that if you want to know what successful people are like--study successful people. You will never fully understand what a successful person is like if you devote all of your energy to the study of people who fail. In the Human Resources Foundation at the University of Nebraska, we are accumulating a surprising amount of evidence from our research which shows the key to the development of human potentiality is people--that is to say, what any child might become is directly related to the input of people around him. Each time a child has contact with others during his developmental years, a personality portrait is being painted for him just as surely as an artist strokes a portrait with his brush on a canvas. The quality of the relationship is the primary ingredient in providing a climate for maximizing human potentiality--far more essential than physical surroundings or the techniques utilized by the facilitator.

It is for you, the psychologist, the teacher, the vocational rehabilitation counselor and other specialists who devote full-time working with the visually handicapped, to work cooperatively to design and select the special techniques and facilities that bring out the very best in the way of positive growth and development in children. Each of you as a result of participating in this conference with other experts will learn several new and useful ideas concerning the technical aspect of working with the visually handicapped child who functions on a retarded level. Therefore, it will be the purpose of this address to share with you some ideas about one characteristic which clearly permeates throughout the facilities and techniques--that is the humanistic aspect of the climate for facilitating positive growth.

Recently there appeared in the Reader's Digest an article entitled, "The Day the Desert Bloomed." This story related how in the most arid part of the country where the average annual rainfall is less than 1/100 of an inch, once about every ten or fifteen years there will be a period of heavy rains. Then about ten days later in a geographical region almost devoid of vegetation, beautiful foliage and flowers will grow and flourish. I know that some of the individuals we work with will have experienced quite a drought; however, I want to share with you some ideas which should be helpful to parents, professionals and interested community members working with the visually handicapped who operate at a retarded level--ideas that are quite analogous to the rain in the desert, but in this case we are interested in promoting positive growth in human beings instead of vegetation.

The world famous research pediatrician, Dr. Rene Dubois, writing in the foreword of a book entitled How to Raise a

Child stated that a child is born with potential--this potential is a promise not a guarantee. The extent to which a child is able to utilize his potential is directly contingent upon the stimulation he receives from his interaction with others as he grows and develops.

The type of relationship you establish with a person can provide very significant input in terms of shaping a personality portrait. There are many principles which could be applied in the development of human relationships which facilitate positive growth. I have selected four principles to discuss with you. They are the concepts of spontaneous stimulators, empathy, unconditional acceptance and investment.

Although with very young visually handicapped children, it is necessary to provide an extraordinary amount of intellectual, cultural, and social stimulation through the utilization of senses other than visual, they are capable of finding their strengths and interests at an early age. Unfortunately, too much emphasis is placed upon what children cannot do rather than upon what they can do. Working in the capacity as psychological consultant for vocational rehabilitation, pre-school, public day and residential school programs for the visually handicapped, I have found that children and adults have spontaneous stimulators. Spontaneous stimulators in human beings are analogous to a button on a high voltage generator. If you locate and activate the button, you can release tremendous amounts of electrical energy. People of all ages have special kinds of interests and talents that motivate them to react spontaneously and release tremendous amounts of human energy. An avid hunter will walk miles and miles in the search of game, but do you think this same person will go for a walk around the block with his wife on a beautiful spring evening?

The phrase "hot button" has been coined to refer to the spontaneous stimulator concept. Listening is the key to locating "hot buttons" which are an important part of a person's personality portrait. One of the best ways to discover what is relevant or important to an individual is to ask him and then listen carefully to what he says. Then, if you want to facilitate positive growth, simply provide him with opportunities to develop his interests and talents. Too often we get caught up with doing only those things that are important to ourselves and proceed in a manner which is least threatening for us.

The next principle I would like to discuss with you is the idea of empathy. Empathy is looking from the inside out--seeing through another person's eyes. Someone has said that empathy is when your friend has a hole in the sole of his shoe

and your foot gets cold. To sell John Jones what John Jones buys, I must see John Jones through John Jones' eyes.

A man was putting up a sign, "Puppies for Sale," and before he had driven the last nail, there was a small boy standing at his side. That kind of sign seems to attract small boys. The youngster wanted to know how much the puppies were going to cost. The man told him they were very good dogs and that he didn't expect to let any of them go for less than thirty-five or fifty dollars. There was a look of disappointment, and then a question: "I've got \$2.37. Could I look at them?"

The man whistled and called "Lady"--and out of the kennel and down the runway came Lady, followed by four or five little balls of fur, with one lagging considerably behind. The boy spotted the laggard and pointing asked, "What's wrong with him?" The reply was that the veterinarian had said that there was no hip socket in the right hip and that the dog would always be lame. The boy's immediate rejoinder was, "That's the one I want to buy. I'll give you \$2.37 down and fifty cents a month 'til I get him paid for." The man smiled and shook his head. "That's not the dog you want, that dog will never be able to run and jump and play with you."

The boy, very matter-of-factly, pulled up his little trouser right leg and revealed a brace running down both sides of his badly twisted right leg and under the foot with a leather cap over the knee.

"I don't run so well myself," he said, "and he'll need somebody that understands him."

In all of our studies those individuals who are successful in facilitating positive growth, characteristically possess a high degree of skill in empathizing with others.

The third principle is the principle of unconditional acceptance. Individuals who cannot see can perceive whether or not they are accepted by others. Unconditional acceptance accompanied with the manifestation of a posture of futuristic growth orientation is a requisite for facilitating positive growth in others. Simply because you are a human being is the only credential you need to have to be accepted by another. Too often we destroy others by placing them on trial over a period of time which is filled with something less than futuristic growth oriented opportunities.

The investment principle incorporates the concepts of "hot buttons," empathy, unconditional acceptance and all other principles of facilitating positive growth. The investment

principle, like the thread in a quilt which ties all the patches together in a pattern, puts all of the principles together and sharpens the personality portrait.

One of our associate directors of the Human Resources Foundation has developed a theory which best illustrates the investment principle. It is a simple theory about a dipper and a bucket.

Everyone has a bucket. It is always with us. It determines how we feel about ourselves, about others, and how we get along with people. Have you ever experienced a series of very favorable things which made you want to be good to people for a week? When this happens your bucket is full to overflowing.

A bucket can be filled by a lot of things that happen. When a person speaks to you, recognizing you as a human being, your bucket is filled a little...even more if he calls you by name, especially if it is the name you like to be called. If he compliments you on your dress or on a job well done, the level in your bucket goes up still higher. You make a mistake; a friend says, "I have had this happen to me. Let me give you a hand." There must be a million ways to raise the level in another's bucket; writing a friendly letter, remembering something that is special to him, knowing the names of his children, expressing sympathy for his loss, giving him a hand when his work is heavy, taking time for conversation, or perhaps more important, listening to him.

When one's bucket is full of this emotional support, one can express warmth and friendliness to people. But remember, this is a theory about a bucket and a dipper. Other people have dippers and they can get their dippers in your bucket. This, too, can be done in a million ways.

Let us say I am at a dinner and inadvertently upset a glass of thick, sticky chocolate milk that spills over the tablecloth, on a lady's skirt, down onto the carpet. I am embarrassed. "Bright eyes" across the table says, "You upset that glass of chocolate milk." I made a mistake, I knew I did and then he told me about it! He got his dipper in my bucket! Think of the times a person makes a mistake, feels terrible about it, only to have someone tell him about the mistake as though he did not know it happened.

Buckets are filled and buckets are emptied. Emptied many times because people do not really think about what they are doing. When a person's bucket is emptied, he is very different from when it is full. You say to a person whose

bucket is empty, "That is a pretty tie you have," and he may reply in an irritated, defensive way, "What's the matter with my tie now?"

Although there is a limit to such an analogy, there are people who seem to have holes in their buckets. When a person has a hole in his bucket, he irritates a lot of people by trying to get his dipper in their buckets. This is when he really needs somebody to pour into his bucket because he keeps losing and losing and then takes disproportionately from others to fulfill his needs.

The story of each personality is the interplay of the bucket and the dipper. Everyone has both. The unyielding secret of the bucket and dipper is that when you fill another's bucket, it does not take anything out of your own bucket. The level in our own bucket gets higher when we fill another's and, on the other hand, when we dip into another's bucket, we do not fill our own--we lose a little.

Sometimes we can protect ourselves and others by saying, "Hey, you have your dipper in my bucket!" or, "We are getting our dippers in his bucket." Instead we can say, "Let's fill his bucket!" and in doing this create a climate for positive growth.

We have only just begun to scratch the surface when it comes to discovering the type of climate which maximizes human potentiality. Special physical facilities and techniques are helpful in promoting positive growth in the visually handicapped child only to the extent that staff members are developing close one-to-one relationships based upon the concepts of spontaneous stimulators, empathy, unconditional acceptance and investment.

It would be unforgivable for us to close our eyes to our inadequacies and lack of effectiveness in providing programs for the handicapped. A handicapped child is entitled to the best type of program we can possibly provide. On the other hand, research hypotheses concerning the characteristics of ineffectiveness and inadequacy result in research conclusions concerning the characteristics of inadequacy and ineffectiveness.

It seems very appropriate to close this address with the words of Dr. Elizabeth Drews, who said, "Be careful of what you want, because you might get it." I am certain we all want to discover the type of climate which will maximize the potentiality of visually handicapped children and this conference is certainly a positive step in that direction.

Visually Handicapped Children and Current Trends in Services

Speaker: Verna Hart, Ed.D., Assistant Professor
Department of Special Education
George Peabody College for Teachers
Nashville, Tennessee

It is always interesting to talk with people of varying backgrounds about children with visual handicaps. There are many knowledgeable people in this audience who because of their vast experience could present this subject far more competently. At the same time, there are those of you who know nothing of visual deficits, and it is to you that this paper is offered. It is a brief review of the terms used regarding visual handicaps and a resume of recent trends in the field, assuming an unsophisticated degree of knowledge and information for those who are not closely connected with this area.

When blindness is mentioned, the average person thinks of total blindness, of nothing but black. One of the mothers in the Peabody College program was talking to the visiting home teacher this past winter. She had a six-month-old child who had been referred to the program as a blind infant. The mother had been most uncooperative in carrying out simple sensory stimulation instructions, and the teacher was trying to determine the reasons. The mother finally blurted out the cause--she was failing to carry out directions because she did not believe her baby was blind! She based this on the fact that when the baby was in bright sunlight and a shadow passed directly over her eyes, she responded to it.

The teacher then discussed what she assumed had already been explained, that in blindness, as in many other areas, things are not all black and white, but there are shades of gray. The fact that there is wide variation in the amount of remaining vision any one person may experience is one of the reasons for the change in nomenclature within the field from "blind" to "visually handicapped." Blindness, as it has been legally and traditionally defined, ranges from 20/200 vision through counting fingers, hand movement, light perception, all the way to the total lack of vision which most people view as "blindness."

In previous years, the custom was to send blind children fitting all these categories of residual vision to the residential schools for the blind. Those with a little more vision were sent to "sight-saving" classes. The blind children, no matter how much remaining vision or what their level of visual functioning, were taught braille; and those in sight-saving classes were taught, when they had to use their eyes, to read large print.

Many events within the field brought changes in the education of children in blind and sight-saving classes. It was determined that the use of the eyes which previously had been felt to be detrimental to the child's vision was not harmful but actually beneficial. The more the child used his vision, the greater became his degree of visual functioning. Children who were braille readers became large print readers, and large print readers learned to perceive regular print.

By making these tremendous gains in the use of vision, it became necessary to discard the previous nomenclature of "blind" and "sight-saving." Children became braille readers and print readers, based on the use of their vision rather than on the legal definition of blindness. Thus, we no longer talk only of blind children, but of visually handicapped children, taking in the very broad area of children who have visual problems to the extent that special educational considerations must be given to their use of vision in the learning situation. Emphasis is now given to developing the child's remaining vision rather than to dwelling on the amount of visual loss; on visual functioning rather than visual acuity. This is the current challenge to those in the education of visually handicapped children.

Another direction in the education of visually handicapped children is the placement of children within the neighborhood school rather than sending them away to the residential facility. Families who have wanted to keep their children at home have found that visually handicapped children can function within the regular school setting. They have performed so well that they are rarely segregated into isolated self-contained classrooms, but are placed whenever possible with normal seeing children. Itinerant and resource room teachers have been trained to meet the particular needs of visually handicapped children in these normal classroom situations. These factors, along with the increasing numbers of children who can read print, have changed the ratio of visually handicapped children who receive their education predominantly in a residential school to greater numbers in the day school setting.

Present technology in areas other than education has helped those in education to develop aids for the use of visually handicapped children. Magnifiers and other equipment for enlarging print have helped students in their efforts. Better quality of print and braille are both available, as well as efficient means of reproducing them. Electronic devices are being developed and used to scan the printed word, to develop the tactual modality, and to aid mobility.

Educators have become more realistic in their teaching efforts and now realize that not all of the visually handicapped population will become print or braille readers. Recorded instruction has become increasingly available for the aural learners, and this has been a great aid for those who previously had failed to respond to the brailled or printed word and were therefore tagged "non-learners." Researchers are currently engaged in varying the speed and method of presentation of the recorded material to determine the maximum use of this material as a teaching tool.

Medical technology has presented many new challenges to those in the education of visually handicapped youngsters. The greatest challenge has not come from the use of aids developed, but in the children who result from using them. In spite of the fact that physicians now are aware of the fact that too much oxygen in the incubator of a premature baby can result in blindness, children with this etiology continue to appear, for doctors increase the oxygen if the child's life is in doubt. Cancers that caused blindness previously took the lives of their victims. Modern medicine has found effective means for controlling or alleviating the cancer at the expense of the vision. The genetic aspects of some of these cancers also present an issue to educators, for teenagers need genetic counseling.

The greatest challenge science has posed for educators has been in the area of multiple handicaps. Babies who previously would have expired and children with formerly terminal diseases are being kept alive, often with severe physical and mental problems. A whole new population is now in need of educational, psychological and medical services. Experience with these children has brought forth one fact that stands before all others. No matter how severe his handicapping conditions, there has not been a single child who has not educationally benefited when the learning steps have been sufficiently simplified or adapted. Nor is it unusual to find children who have been judged profoundly retarded who have doubled their I.Q. scores after an effective educational experience.

Findings from medical, psychological and educational investigations stress the importance of very early education, emphasizing the preschool years for developing intellectual potential of the children. Educators of the visually handicapped know this to be particularly true. There is no better time to receive a referral than when the child is still in the new-born nursery. Parents are usually completely bewildered and unprepared to raise a visually handicapped child.

To many, being blind is synonymous with being incapable of learning.

In a recent workshop for parents and their preschool children, a mother and grandmother accompanied a two-year-old child who was born without eyes. The child was placed face down on a blanket and the only activity observed was crying and sucking on the bottle that was provided whenever he started to fuss. There seemed to be no interaction between the child and his grandmother who cared for him or with his working mother. In fact, the mother seemed most uncomfortable in his presence. Whenever it was necessary for her to handle him, she passed him to his grandmother at the first opportunity. Questioning brought forth a consistent answer. Nothing had been tried with the child because he was blind. He had not been propped to a sitting position because "we didn't know blind babies could do that." Solid foods had never been attempted because "we didn't know blind babies could chew." Toys had never been given him because "he wouldn't be able to see them."

The parents and grandmother were given specific instructions and the child was seen one month later. During that time he had learned to sit so well he could compensate for his changing balance on a teeter board and not tip. He had learned to eat table foods and was able to bring the filled spoon to his mouth. He had learned to grasp objects and shake the noisy ones. But his greatest improvement was in the interpersonal relationship he had established with his mother. This non-verbal child was cuddled and hugged by his mother. He was cooing, babbling and smiling in response. A seemingly profoundly retarded child was beginning to function, all because the adults in the household became aware of the fact that blind babies can learn.

Working with the young visually handicapped child has been an extremely challenging experience but a thoroughly rewarding one. Too often workers with children are prone to blame parents for the lack of achievement by their children. The fault often lies with us as professionals, for we assume parents know much more than they do and are capable of handling their child by intuition rather than by specific suggestions.

All children have at least three specific tasks that they should complete during their first three years. They must learn some means of locomotion, that language can be used as a means of communication, and to relate to people. Visually handicapped children have difficulty in attaining each of these tasks without instruction. Blind children are not aware of the means that others use to get from one

place to another because they cannot see them. One must place noisy toys just outside the reach of visually handicapped youngsters and teach them to reach and move to get them. The youngsters must be encouraged to get up on their feet and walk from place to place. They must be encouraged to move and must be protected from harm while doing so, but not to the extent that the children become too sheltered. Visually handicapped children, even to a greater extent than normal children, will have to learn to accept bumps and bruises, for they will always be present. There will always be the chair that is moved out of place, the tricycle left in the middle of the sidewalk, and the step or curb that was not anticipated. It is well that the children learn to accept these bumps when they are young and encouraged to explore in spite of them.

Mobility, or a lack of it, is often a factor that prohibits adults from obtaining a job. A trend in the education of visually handicapped children is to work on mobility skills with younger and younger children. The basic skills begin at a very young age and adequate training at this stage can greatly enhance the techniques that will be later offered by a mobility specialist. The children must have the opportunity to know and understand their own bodies, to develop them through physical movement and exercise, to explore, and to look. All of these opportunities contribute to the child's mobility education.

Learning language presents a unique problem to visually handicapped children, for the children must learn their language concepts tactually. Their mental images are based on these tactual experiences. There are some concepts that cannot be learned tactually--the height of a tree, the color of the sky, and the intense heat of a fire. These children need a systematic introduction to their world, and concepts a seeing child learns incidentally by merely living and playing in his environment must be taught to visually handicapped children. Blind children do not develop the eye-hand coordination of normal vision children and must substitute ear-hand instead. Those with usable vision must learn to use it so they can develop the eye-hand coordination so necessary to learning. Again, this must be taught, not left to chance. Some parents instinctively give their children the right type of experiences for developing useful vision and language concepts, substituting tactual experiences for those they cannot see. The majority, however, rely on workers for visually handicapped children for their direction.

The spoken language is a necessary way of life for visually handicapped children, and the children must learn that words

mean something. They must understand that words can describe actions, reactions and feelings. They must also learn that words can cause actions and reactions to occur.

Young visually handicapped children need a verbal step-by-step description of the activities going on around them, for this is the way they identify the sounds of the telephone, doorbell, bath water and perking coffee. Such verbal descriptions are extremely difficult for members of low-verbal families. All too often children are referred to as "deaf-blind" when they are blind children who can hear but are non-verbal. When talking with their parents about their verbal environment, it is often discovered that the children are kept in their cribs in isolated bedrooms. Although their physical needs are met, there is little or no opportunity for the children to hear speech and identify sounds.

This has particular implications for our ghetto children, for there is little verbal stimulation available to them. The loud blare of the ever-present television set does not provide this needed stimulation, for it is always there without being used to teach the language concepts needed. Often children learn to tune out all verbal inputs because of their reaction to the auditory over-stimulation the T.V. presents.

When teaching language concepts to visually handicapped children, it is important to teach concretely. The children learn by direct observation of the object. A verbal description should be given so the children can connect the spoken words to the object. Some blind children have been known to describe a tree in detail but have been unable to identify one when in actual contact. It should be pointed out that purely verbal signs mean something different to sighted and visually handicapped children because of their differing experiences. Children should be urged to talk about the concepts so that misconceptions can be cleared up.

Abstractions are less easily taught than concrete concepts. Some aspects can be taught but others cannot. This can result in a four-year delay in visually handicapped children reaching Piaget's Pre-operational Stage of Development where children learn to use words to signify objects. This can also evolve into "verbalisms" in the Concrete Stage. The children have a facility with verbal logic but do not have the concrete foundation necessary for flexibility and reversibility in thought processes. Previous experience is necessary--verbal behavior is not enough.

Learning to relate to people is another behavior that should be learned during the first three years of a child's life. It is particularly important that visually handicapped children

receive careful nurturing in this area. They must get ideas of other people and their reactions and feelings from their voices rather than through facial expressions and gestures. Parents and teachers who have disciplined children through facial expressions must learn verbal or tactual means of control. Visually handicapped children must learn to turn their heads in the direction of the person speaking, and this can be learned as an infant on a mother's lap.

Children who lack visual feedback are unable to tell when they are receiving disapproving or shocked glances. How well I remember a blind friend telling how she used a sugar bowl for an ashtray. Not one person in the dinner group told her, but there must have been many raised eyebrows. Only when her husband returned to the table was the error pointed out. Blind children must be taught that there will be many such incidents in their lifetimes and that they must have a strong sense of humor and a well-developed ego to withstand the embarrassment that is sure to follow such occurrences.

Children must learn that others will react differently to their lack of sight. I observed one such reaction while riding a city bus. A passenger was incensed and called a man with colored glasses and white cane a fraud because he had enough vision to find an empty seat. The passenger was sure he could not be blind with that much vision. Sometimes knowledgeable people will offer their arm and act as a sighted guide, while others will push visually handicapped persons before them, creating untold hazards for them. Some will lead a blind person into a room and leave him there without verbal explanation of where he is--or that he is leaving. The person is merely deserted. Children must be prepared for these events and be alerted to ways in which they can respond.

These are some of the things children must learn, but parents must become knowledgeable too. They must become cognizant of their children to see how they learn, how much they see, to talk to them, to stimulate them, to discipline them, to appreciate them for the things they can do, and to accept them for what they are. One mother, when questioned regarding her feelings about her retarded blind son replied, "Well, I reckon every family's got to have a slow one, and he's mine." Parents must learn to guide and direct their children, not leaving them by themselves to self-stimulation or the development of mannerisms. They must encourage them to do things for themselves, to hear, touch, smell, taste, and use their remaining vision. Above all, they must give realistic, safe and sensible limits within which the children can learn to

function. They must teach them to care for their own needs, to find their own toys and care for them, to meet children and learn to play with them, to respect the rights of others, and to reach out to the world for stimulation. Children are sometimes placed in a playpen or in the middle of the room and all things are brought to them. They become extremely egotistical, thinking of themselves as the center of all activities. Such reactions can be prevented by structuring the children's lives so they must react to others and must function in a give-and-take relationship. They must develop curiosity so they will desire to reach out to objects and persons. And they must be taught about their vision. Visually handicapped children need to recognize that there are some restrictions placed on them because of their handicap but that there are many other activities in which they can participate.

Freschool workers must aid the parents in helping their children with these tasks. When the children reach school age, teachers then can build on a good foundation instead of having to initiate the concepts. The importance of early education cannot be overemphasized to enable visually handicapped children to develop to their maximum potential. Too often teachers and rehabilitation personnel must assume responsibilities that should have been taken by the parents. One teen-age blind student was indignant when informed that the hold on her spoon and the use of her hand as a pusher was behavior appropriate only for very young children. Disbelief filled her voice as she stated that could not be, for certainly someone would have told her before. How sad that someone had not! Visually handicapped children need the same kind of manners as sighted children to make themselves socially acceptable. If they are knowledgeable in this area, they are less likely to be pointed out as "different." Good manners used by severely retarded blind children can do much to help others view them as normal.

The primary responsibility of all those who work with visually handicapped children is to view the children as children first. The generally accepted norms of child development should be used as a guide in helping children who are blind or who have visual impairment to function within their capacity. The basic needs of these children are the same as for all children and must be considered first. Concern for the handicapping conditions should be reflected only as they affect these needs. By recognizing this, the children can be assured of what they need to reach their maximum potential.

A Battle Is Won--The War Is In Doubt

Speaker: Joseph E. Hubbard, Ph.D.
Tempe, Arizona

The title of the topic under consideration is "A Battle Is Won--The War Is In Doubt." For you who are familiar with the field of mental retardation, the optimism in the phrase "a battle is won" may seem somewhat premature in relation to retardation, and some of you may feel that the battle is, and has been, lost for many years. I trust that the statements I am about to make may increase your appreciation of the tremendous changes taking place in the development of services for the mentally retarded and alert you to the difficulties that lie ahead.

It may be well to begin with a brief look at the historical antecedents which have led us to our present level of achievement. You will recall that services in the United States for the mentally retarded began in the last half of the 19th century with the building of special centers in the eastern part of the country. These were originally designed so that the retarded could be trained and then returned to the community. As the years passed, it was discovered that some of the retarded could not be restored to a normal level of functioning and had to remain in residence at the center because there were no appropriate community services available to them. It was the lack of a full range of community services which led to the conditions which are found in many of the old large institutions today. These conditions cause many of you to be pessimistic about the future potential for helping the retarded.

As the years went by, more and more of the retarded were brought to these centers for training, but many had to remain for permanent care. The law of supply and demand began to get out of balance and by the very early 1900's, it was evident that the centers would have to be enlarged or alternative services in the community be found. Unfortunately, two powerful forces blocked the development of these badly needed community services.

In the President's Committee on mental retardation monograph, Changing Patterns in Residential Care, several articles document the fact that those in leadership positions in the field of mental retardation in the early 1900's were advocating removing the retardates from the community and placing them in "colonies" where they could enjoy a good life with others of the same mental capacity. It was suggested that they might become almost totally self-supporting in these "schools" (as some were euphemistically called) by growing their own

produce and working to maintain the center on an operational level. This powerful influence, springing from some of the leading professionals of the day, was enough to insure the continued development of large isolated institutions.

It would be unfair to imply, however, that all professionals at the turn of the century supported the philosophy of isolation of the retarded. Some objections were beginning to be raised concerning the desirability of the retarded remaining neatly packaged in their own tidy communities. But political forces were at work which resulted in the First World War being waged in a manner which makes the treatment of the retarded in institutions seem kind indeed. The chaos which followed World War I, the reconstruction, the need to return to a peace-time economy, all served to delay the development of community resources for the retarded. So a pattern was set which was to bind the retarded to their second-class place in society for many decades to come.

During the 1920's there was a growing recognition of the fact that all was not well with the retarded who were living in their "retreats"; nor was it going well for those who had to remain in the community. The concept of no care or total care again began to be recognized as inadequate if the full development of the potential of people with disabilities was to be accomplished. A need for community services once more was recognized as a vital necessity, but again political forces intervened. A world-wide recession plunged the United States and the world into a destructive downward economic spiral which created as much misery in its way as the "War To End All Wars" did. The sins of the parents, so to speak, were once more visited upon the children, and the retarded waited at home with no programs or in institutions with only custodial care while the world recovered from the recession.

But no sooner did the world recover from the Great Depression than it was plunged into another World War. Most of you are familiar with man's inhumanity to man during the course of this conflict, and once more the treatment of the retarded seems almost humane when seen in the light of this devastation. However, the retarded's time was about to come. The institutions had been growing in size and expense, and taxpayers began to wonder when it would all end. Parents began to wonder when their child might be given a chance, and professionals began to seek new ways to deliver services. As the United States started to recover from World War II in the last half of the 1940's, a great new dramatic force emerged to give the retarded their place in the sun.

In several places throughout the United States, informal groups of parents who had retardates living at home started to get together in order to share their common concerns. In the early 1950's a formal organization called The National Association for Retarded Children was created. Soon most states had affiliated chapters and a great new political force working for the retarded was abroad in the land.

By 1960 this organization, composed mostly of parents, had marshalled enough power to influence the U. S. Congress and the President to create the President's Panel on Mental Retardation, which later developed into the permanent President's Committee on Mental Retardation. The National Association for Retarded Children began asking the professional leadership in mental retardation why so much money was being spent on so few retardates in isolated institutions while more than 90% of the retardates were being completely ignored. Some professional administrators asked the same questions, and the battle for a broad range of community services for the retarded was on its way to being won.

Regional centers were gradually developed for the specific purpose of offering services at the community level. This concept soon led to the development of community services via purchase of services from non-profit private agencies. This arrangement eliminated the need for state or county governments to get into the business of building and operating centers. Experience has shown that government has never been able to perform services effectively and economically as adequately as private enterprise. When government --whether county, state, or federal--does attempt to get into the service field, inefficiency and wastefulness is the inevitable result. But in the purchase of service role, government no longer operates programs but rather tends to function as a regulator of private industry which does offer the service. The government then insures that minimal levels of performance are maintained--a role which is more in keeping with government's capabilities.

With the acceptance of the "purchase of service" philosophy by many administrators in mental retardation, we come to the end of our historical jaunt through the past decades and find that the long awaited development of "community services" for the retarded has finally arrived. Recent trends indicate that more and more states are budgeting "purchase of service" money or building small (less than 500 beds) centers located near or in cities where services are most needed. Some states have rather dramatically enlarged their budgets for purchase of care until it is comparable with, or exceeds, what was formerly budgeted for residential institutions. The battle is won and the retarded are slowly being brought out of their

banishment to the back rooms and wards and into the mainstream of a society where they do have a contribution to make.

But why then, you ask, if the battle is won, is the war in doubt? What can possibly stop the continued growth of community services which is now being so eagerly pursued by so many? The answer to these questions is not easy to find, and solutions are even more difficult to come by. Let us examine what causes some of us who are in administration of mental retardation programs to be uncertain about the outcome of the war.

We must remember that while purchase of community services has increased, the cost of maintaining the old large institutions has not decreased. In fact, costs are steadily increasing at government operated centers of all sizes. These are several reasons for this cost spiral:

- (1) Minimum wage laws and union activities are increasing personnel costs.
- (2) Overhead related to state personnel commissions, state central offices, state finance divisions, state attorney general services, state auditor services, governor's office, etc., all combine to raise significantly the cost of services offered by a state agency.
- (3) Regulations related to employment in state agencies tend to encourage the number of marginal workers who can remain on the payroll.
- (4) State programs are not responsive to changes in consumer needs; they tend to perpetuate outmoded services long after they have little value.
- (5) Government operated programs are often exempt from meeting minimal standards required of non-government operations, especially in the area of safety, health and training.
- (6) Since buildings belonging to the state are rarely sold, political leaders believe it is less costly to operate obsolete and inefficient programs rather than start new ones.
- (7) Governmental programs once started are nearly impossible to abolish.

In most cases, the reasons for spiraling costs in government programs do not apply in private non-profit ones. Private

corporations do not usually deal with unions; their overhead in commissions, boards, governor's office, etc. is very small or non-existent; they can fire less productive workers; they readily change as consumer desires change; they are subject to minimum safety, health and training standards; they can more easily move to better buildings; and they are easily abolished when they no longer meet the need. It is for these reasons that the outcome of the war for better services for the retarded is in doubt.

No society can indefinitely spend excessive amounts of monies on outmoded program concepts without inviting the withdrawal or reduction of taxpayer support of all programs. In this age when pollution, crime and welfare problems are multiplying, those of us in the field of retardation realize that we must soon show a cost reduction in units of service offered if we are to sell our programs to the taxpayers. And it is in this very area of attempting to reduce the cost per unit of service that the war is raging.

To increase the level of support for community services and at the same time perpetuate the institutional concept leads to unit costs per service which cannot long be afforded by any society. For example, the poverty level for a family of four has been fixed at about \$3,900 per year. The cost to maintain retardates in state institutions ranges from this poverty figure to twice that amount; and the level of care in state institutions for one retardate is often no better than that which is experienced by a family of four living at the poverty level.

Can a society afford to spend so much money on retardates in settings where they are, in many cases, made even less productive as people? The answer is "no." State operated institutions that exist in isolation are no bargain at any price. They must be phased out if the fiscal integrity of programs for the retarded are to be maintained.

The forces which will battle against this phasing out of the old large isolated institutions are two-fold. The first resistance comes from people who actually work in these institutions. They fear the loss of their jobs, and the nearby communities fear the loss of the institution's payroll. Many of the administrators of these inadequate programs often propose reform, but there can be no improvement of programs until community services can be developed. The very large budget to run the institution works against the creation of community services and thus stymies the reform process. So a vicious circle is established which keeps the program custodial and impotent while promises are made each year that things will be better soon.

The second force that battles against the phasing out of old institutions is political. Many conscientious politicians are honestly confused when confronted with the need for purchasing services in the community and phasing out institutions which exist in isolation. Not too many years ago they heard administrators of residential facilities plead for more building funds and promise a solution to the mental retardation problems facing society, if only they could build more facilities. Now they hear some administrators pleading for community services monies and advocating the emptying of the institutions. The politicians, who cannot possibly keep abreast of the problems in mental retardation, often have as their primary concern the desire to keep a program in existing buildings long since paid for and stay with the old methods rather than undertake new ones.

And when these two forces, the staff working in old institutions and politicians, are reasonably united, the likelihood of major changes being accomplished is small indeed. Thus, the outcome of the war is in doubt. If the large old institutions are allowed to remain, then a state cannot divert all the needed monies into community services. Without community services, what chance does the institution have of reducing the number of residents and returning them to the community?

At this moment, there is little evidence that politicians or professionals thoroughly understand the dilemma. They do not sense the urgency to reduce the cost per unit of service. If a family of four can live at the poverty level of \$3,900, then one retardate must receive much more than he now receives in the institution if we are to expend anywhere from \$4,000 to \$8,000 on his care.

Time does not permit us to discuss the new opportunities to be found in industry for the retarded who are living in the community. With the coming of mechanization, the demand for workers who are able to perform repetitive work operations is on the increase. Retardates make good, dependable workers in factories where routines are rarely changed. For years, retardates in institutions did most of the routine jobs there at a considerable saving to the taxpayer although at a prohibitive social and psychological cost to the residents. Now these same skills can be used in industry to the benefit of everyone. The work the retardates do is not that highly prized by other workers; thus, there is very little competition for these jobs.

When training programs located in the community, and in some cases developed in large industrial complexes, are realized, the people who have developmental disabilities (as they are

now known) will come into their own. Parents will be no more concerned when they find their child is slow in developing than when they find he is well ahead of his class in algebra. They will know that there is a productive place for him in society and a place where he can achieve that satisfaction which must be guaranteed to all of us if we are to remain free. We have made great strides in providing community services for the retarded in the '60's. Will the '70's find us able to maintain this momentum? We devoutly hope so, and we invite all of you to help us win the war for strong community services for the retarded. You can help by joining us in insisting upon the phasing out now of the large isolated institutions which are still found in almost every state in the union.

I should like to close with a question that a friend of the retarded has written:

"WHO WILL HELP ME?"

My name is Frankie and they want me to tell you something about mental retardation. Look, I am retarded, but I don't know what that means. I can only tell you how I feel.

People ask me, "Can I catch what you have?" No, it isn't contagious. I was born this way, or perhaps I was in an automobile accident, or maybe as a baby I ate the paint on my crib and it contained lead. I don't know for sure. I don't remember, but don't worry about it--I have it and you can't catch it.

Also, they ask me, "Are you crazy?" No, I'm not crazy either. I can't always explain what I'm thinking and many times I forget things, but this doesn't mean that I'm crazy. My reactions are slow but I am not crazy.

Then, they ask, "Wouldn't you be happier with others like yourself?" How can I tell you what this means to me? I want to be free, like you! I want you to be my friends. I need you! What did I do to you to make you want to put me in a world apart from yours? I can do much more in your world than in one apart.

Finally, they ask me, "And just what can you do?" This is the question I like because I have many answers. I can work, if you'll give me employment. I can be a janitor, a cook's helper, a farmer, a

gardener, and many other things. If I were a woman, I could be a housekeeper, a seamstress, a waitress and a lot of other things. I can do it, if you would just give me a chance.

Also, sometimes I need a place to stay. If you would let me or one of my friends live with you, I could help you at home. I would be willing to help your family with the money that I would earn from my job.

Sure, this wouldn't be easy for me. I have a lot to learn, but I will do it. I know I can.

Now, I have only one question for you, "Will you help me?"

II. ASSESSMENT

Chairman: Miss Georgie Lee Abel
Professor of Education
Department of Special Education
San Francisco State College
San Francisco, California

Development of the Child with Sensory Impairment

Speaker: Toni Marcy, M.D., Research Pediatrician
Division of Child Development
Department of Pediatrics
University of California
Los Angeles, California

Summary: Dr. Marcy opened this presentation by showing film material which has been developed by Dr. Arthur Parmelee, Head, Division of Child Development, Department of Pediatrics, University of California at Los Angeles. This material is a record of selected sequences of development of twins, one blind and one sighted, showing both similarities and differences in their development.

Speaking of young blind children in general, Dr. Marcy commented that in testing these children and in working with them, the examiner, or the parent, usually works harder in an effort to elicit certain responses on the part of the child whether he is blind only or multiply handicapped. She cited especially the example of attempting to elicit a smile from the young blind child which often takes longer than with a child who sees.

After the viewing of the film, Dr. Marcy discussed some of the general causes of blindness in the child population today. Mention was made particularly of congenital cataracts (with a comment to the effect that the child should be expected to develop well unless there is some other handicapping condition); Down's syndrome and accompanying mental retardation; retrolental fibroplasia (with a comment that the number of emotional problems which occur in children blinded by this condition may be caused by anxiety on the part of parents).

The rubella syndrome was mentioned especially because of the number of children who are blind and multiply handicapped as a result of the epidemic of German measles in the period 1963-65. Dr. Marcy spoke of the difficulties in early assessment of rubella children and pointed to the follow-up study of rubella children in Australia made 25 years after the effects of maternal rubella were originally identified. At that time most of these children were given

poor prognoses which proved to be erroneous; only 10% of the 50 persons in the follow-up study were found to be retarded.

Dr. Marcy mentioned the Gesell items as useful when testing children who are blind, provided there is understanding and interpretation of the blind child's behavior as a result of his visual impairment. She warned against the use of the electroencephalogram as a diagnostic tool of assessment, stating that many blind children show normal development though the EEG pattern appears abnormal particularly in the occipital lead, due to lack of visual input.

Stress was placed on the importance of tactile and auditory stimulation, particularly in the infancy period when the blind baby needs more cuddling and handling. The daily routines such as bathing, feeding, dressing and play offer opportunity for stimulating infant growth and development.

In speaking about the normal milestones in a child's early years, Dr. Marcy called attention to the fact that the verbal development of the blind child seems to be well within range of normal by four years of age. It has been observed, however, that the social development may be delayed by at least a year. Dr. Marcy called attention to factors which may affect the blind child's rate of development such as an unfavorable emotional climate, hospitalizations and a feeling of inadequacy on the part of parents. She emphasized instructional guidance to parents as early as possible after knowledge of blindness in their child as a means of alleviating developmental lag in children and emotional problems which may occur as a result of anxiety on the part of parents.

In closing, Dr. Marcy referred to the significance of the "love bond" between the parents and blind child which has been described by Selma Fraiberg in research concerning ego development of young blind children, being conducted at the University of Michigan.

Precision Teaching the Visually Handicapped Child

Speaker: Robert H. Bradfield, Ph.D.
Associate Professor
Department of Special Education
San Francisco State College
San Francisco, California

Summary: The laws and principles of learning apply to blind children as to all others. There are no learning failures, just teaching failures.

Precision teaching is recommended as a method of working with blind multiply handicapped children who have an impaired feed-back mechanism. This system of teaching involves precise observations of the child and what is happening with him. It is a way of looking also at ourselves first, carefully examining what we are and what we are doing to modify behavior.

Some of the areas of behavior in slow developing blind children we might want to modify include:

- (a) language
- (b) mobility
- (c) eating
- (d) attention
- (e) annoying mannerisms
- (f) tactile awareness
- (g) gestures and expressions
- (h) social skills
- (i) academics (braille, etc.)

Precise behavioral measurement is essential. One needs detail in order to know what one wants the blind child to learn. One must carefully define behavior and then be precise in what he wishes to achieve. The following method is recommended:

- (1) Pinpoint the behavior of concern. That is, define it precisely. It must have a definable beginning and end.
- (2) Count the behavior: record it; chart it.
- (3) Be ready to change--if what you are doing is not working.
- (4) "Try, try again. Let the child tell you."

It must not be assumed that the behavior which one observes is a result of a child's impairment; nor must support be given to the chance things which are done with children. In precision teaching, "you care enough to count and to observe accurately and to be precise about what you are doing with children."

The Planning Process and the Environment

Speaker: H. David Sokoloff, AIA
Sokoloff, Hamilton, Blewett,
Architects and Planners
San Francisco, California

I have spent a good deal of my life solving the wrong problems, and I want to talk a little about problem-solving and problem design. Problem design implies that there are choices as to which problems you want to solve. If you are going to be involved in planning facilities, you have to know something about the process of planning and something about the future because you are creating the future. To know something about the future, you have to know something about change. I am going to talk about the planning process, about the future, and about the barriers to progress, as I see them.

To my mind, planning usually falls into two categories--multi-purpose planning and multi-dimensional planning. Multi-purpose planning is essentially external. The opposite of multi-purpose planning is single-purpose planning. For example, if you designed a railroad from Fort Dodge to Sioux City a hundred years ago, you would have had a fairly simple engineering problem and you could have used single-purpose planning. Today, if you design a freeway from Fort Dodge to Sioux City, you are going to cut through about twelve thousand different jurisdictions, and you have a human engineering problem with vast complications and enormous amounts of variables. If you treat it solely as an engineering problem, you are going to have trouble. If you build a freeway and forget that it cuts towns in two, disrupts people's lives, adds to pollution, you are single-purpose planning, and you create the kind of mess that in general we are finding ourselves in today. This is because everything is becoming inter-involved.

Multi-dimensional planning, as differentiated from multi-purpose planning, is the internal part of planning. We usually plan two-dimensionally. We consider those physical aspects which we understand and with which we are familiar. We can handle safety, maintenance, circulation, etc., but we forget that there is an interplay between humanity and maintenance and that there is an interplay between humanity and technology. For instance, if in a hospital ward for senile ladies, you start to use the technology to develop a highly sophisticated nurses' call system with television monitoring, you might, from an administrative point of view, do a beautiful job, but the women will die because they are not being touched.

Buildings affect people, but usually with a secondary linkage effect. The physiological response of people is very large

indeed. You can adjust to almost anything and survive, sometimes perhaps not very comfortably, but still you can survive. When you plan a building, however, you also plan the role relationships for the people who will use it, and those role relationships affect the users, whether they are staff, patients, visitors, families, etc.

Klaber did a study of some institutions for the mentally retarded in New York State and Connecticut, and he found some extraordinary things. He found that there was no co-relationship between the quality of the architecture and the success of the program in terms of outcomes for those being served. He also found some other interesting things: that the attitudes and procedures which were extant in these facilities had nothing to do with anybody who was there; they had been set long before by people who had disappeared. He discovered that in-service training programs had no measurable result on staff attitudes and that the administration did not know what was going on in their own institutions.

I perhaps should enlarge a little bit on the question of the physical environment affecting the people involved. If you build a building and put a cyclone fence around the whole site, you are saying something to the people who go past that building about what is going on inside. You are saying, "We're protecting you from those inside and keep out." If the quality of the inhabitants' lives depends in part on attitudes of the public towards them, you have affected this attitude by the cyclone fence, and you should be aware of the implications of your decision to erect the fence. If you provide separate toilets for staff and patients in an institution, you have set some role relationships between staff and patients; the staff become officers/aristocrats and the patients become GI's/peasants, and the role relationships tend to remain the way they are set.

What is important is that you know the implications of your choices. We have a small project under construction and it happens to be adjacent to Juvenile Hall, where they are building a facility for thirty children who are very hard to handle. On the outside it is a kind of cottage, but inside it is a maximum security prison. There are thirty single rooms; they have concrete floors, concrete ceilings, concrete walls and a single window. The day I was there the form boards were in place, the steel was in position, and they were pouring the platforms for the concrete beds. The building's cost is \$365,000--to house thirty children. The question which must be asked is, "What's the problem they are trying to solve?"--and as the problem is articulated, so the solution comes. Maybe the conception of the

problem in this case needs some modification. A second implication is that this building is going to have to be used for a long time and, of course, you cannot have a low incidence of use. You might even have to toughen juveniles to keep it filled, because the pressure to justify past decisions leading to such a maximum security facility will always be there.

I want to talk about the future, because the future and the understanding of the future and how to look at the future is in a sense a part of the planning process! Whatever is designed is for use in the future. Amortization for large capital outlays takes a long time, and buildings often last a long time beyond the amortization period. Once you build, you are locked in. But, today is significantly different from yesterday, and tomorrow is going to be significantly different from today! The reason for this, in encapsulated form, is that we have had a tremendous extrapolation of information, and the amount of knowledge is burgeoning at a fantastic rate. We have huge technological advances and instantaneous information transmission. This combined with a population implosion creates a very great inter-involvement; and where the rub is, the action is, and that's what causes change.

I am a middle-aged person, and I have been trained in a certain way and am an extension of my training and the tools that I use: I am essentially a mechanical man. I think in a linear, sequential, fragmenting, specialist way. I am also competitive. The new world, the world of the young people, is an electronic world, and it is a world of simultaneity, of inter-involvement, of generalism, and of sensitivity and fulfillment. These two views are significantly different.

Let me, for just a moment, talk about this idea of man being an extension of his tools. I was interested in Bob Bradfield saying that third graders can handle three-dimensional mathematical concepts better than we can. They really understand concepts of time, the significance of the continuity of space, the mobius strip, etc. It comes natural to them because they do not separate things into linear sequence, they put them together. Last night my wife and I went up to Lone Mountain to see the rock opera, "Tommy," which is a dramatic exposition of this new life-view. The whole time the opera was going on, everyone was involved, cast and audience. We sat there feeling it through our pores, and I mean really feeling it, because the music is coming at you in fantastic volume. We were being asked to feel rather than to separate it all out intellectually and then make judgments.

Let me give you just a couple of examples of how a man is an extension of his tools. In the time of the great European invasions by the Persians, the Persians could not count beyond five. If a Persian general got wind that the enemy was massing out of sight but not far off, he would send his chief of intelligence to find out what was going on. On his return the general would ask, "What kind of opposition do we have?" and the chief would reply, "A whole lot"; that was all he could say if the number were more than five. The only way they could get any idea of the numbers involved would have been through the improbable method of having all the enemy drop pebbles in buckets and then looking at the buckets, since their conceptualizations allowed for no mathematical breakdown.

The Hopi Indians have a sense of time which is totally different from mine (and, by the way, is almost identical with my wife's). Time for me is from dawn to dusk, broken into increments measured by my watch, and I am an extension of my watch--every executive is an extension of his watch! To my wife, and to the Hopi Indians, time is "the corn is growing"; it's a process. This isn't wrong, it's just very irritating.

I want to talk about some key trends--societal trends which are taking place and which we can project into the future--and about key trends in the health and welfare delivery system. Then I want to relate these trends to the handicapped. The key societal trends, as I see them, and most of you are familiar with them, are: increasing population; increasing wealth, and with that, increasing leisure; and at the lower end of the scale, also an increasing capacity for absorbing drop-outs; increasing interdependence; increasing humanism.

There is another very significant trend taking place, and if you have seen the poll by the National Review, William Buckley's paper, of a cross-section of colleges and make a comparison of the views expressed in the 1963 poll with the poll just completed, you will see how quantitatively different this change is. It is a change of values, a change from a competitive system to a person-oriented system. Try to get hold of a paper by Harmon's group at Stanford Research called, "The Nature of Change and Its Implications for Education"; it is a beautiful analysis of the changing value system, its history and its implications. As we move toward the post-industrial society, we see a conflict emerging over the values of the person-oriented society. These have been well articulated by Maslow, Fromm, Leonard Holt, and the new psychiatrists like Laing (The Politics of Experience). Here the goals are fulfillment, sensitivity and awareness, as

against competition, winning and acquisition. I propose to you that it is a significant trend qualitatively and quantitatively.

There are a couple of other trends which, I think, will have great impact upon the handicapped. One that Bradford mentioned is the trend towards "accountability." I think this is in great part due to people like Ralph Nader and John Gardner, who are saying, "If you only have limited funds, limited resources, it means you must make choices, and the only way to convince lawmakers about your choices, is on some kind of a cost/benefit rationale. That is, if you spend the money here, there is more pay-off than spending it there."

Another trend which will affect the handicapped is the increasing importance of consumer input into decision-making. It says in the Model Cities' law that those affected by decisions should be a party to them, but it goes even further because implicitly it says, regardless of the view of the provider as to the worth or competence of the consumer. This is a very significant sociological trend. The consumer must be involved regardless of whether you think he is worthy or competent. This has a great impact as far as the handicapped are concerned.

A third trend that is important is that the primary and secondary occupations are becoming increasingly less important than the tertiary and quaternary occupations. A primary occupation is something like hunting, fishing, mining. A secondary occupation is the processing of the products. A tertiary occupation would be the servicing of the secondary occupations, and a quaternary occupation would be the servicing of the servicing. If the country is becoming richer, if the population is starting to interface, if technological ability through automation and managerial control allows us to accomplish more without as much labor and more efficiently, this state of affairs has huge implications in the area, for example, of sheltered workshops.

Now let me talk about some of the systemic trends in the health and welfare delivery system, which have been clearly articulated by Wolf Wolfensberger of Nebraska. He suggests that the things that once were private are tending to become public; the things that were once voluntary are becoming legislated; those that were privileged are becoming rights; that things which were once permissive are becoming mandatory; the ones remedial are becoming preventative; and that the trend toward institutionalizing is moving toward normalizing. The manifestation of these trends is quite easy to see. Comprehensive health planning is starting to look at the

affect of one program or facility on another. The Developmental Disabilities Services and Construction Act is to be the funnel through which monies for programs and facilities serving those with developmental disabilities will come. At the moment, it only covers those with problems of mental retardation, epilepsy and cerebral palsy, but it is a mechanism which is certain to expand because it starts to look at the person in terms of his whole life span and in his developmental stages as part of the community and as part of his family. And there is the move toward what are known as HMO's, Health Maintenance Organizations. The largest HMO in the country is the Kaiser Health Plan, a prepaid system, where the emphasis is on keeping people healthy rather than taking care of them after they become sick. And then, of course, there is the move toward National Health Insurance, where the cost of keeping people healthy is spread across the board.

I would like to talk for a moment about the concept of normalization because it is the key to anything you may do as far as building is concerned. I do not know whether many of you are familiar with the term "normalization," but it was originally articulated by Bengt Nirje, the Executive Director of the Swedish Parents' Organization for the Retarded. It is articulated in a 1969 publication of the President's Committee for Retardation called "New Trends in Residential Services for the Mentally Retarded." Essentially, normalization means making available the patterns and conditions of everyday life for the retarded person as close as possible to the patterns and norms of the mainstream of society. Normalization applies to the rhythm of the day; for instance, regardless of the degree of handicap, a child gets up and gets dressed because kids get up and get dressed and do not stay in bed. Normalization applies to the rhythm of life--you move out of the home for work and you do not eat, sleep and work in one room. The choices and desires of a handicapped person are considered. A few weeks ago I was in a small town in Pennsylvania, and I was talking to a woman who is the head of United Cerebral Palsy there and who has a severely impaired child. She asked my opinion as to whether eighty were too many children for a residential facility. I asked her if she could communicate with her daughter and she said, "Yes, but I have to ask the right question and then she can indicate 'yes' or 'no.'" So I told her to go on a tour of facilities with the girl and ask her the question and told her she would get her answer. That child can tell much better what kind of situation she will respond to and what will make her happy than I can as a middle-aged, sophisticated expert from out-of-state.

Additionally, normalization means living in a bi-sexual world; that means the bi-sexual world of staff relationships, if you are receiving some kind of care, and it means the bi-sexual world of social relationships. It means normal standards for facilities. It suggests that we need to give people those supports, as they need them, which will permit them to gain the maximum amount of independence, as opposed to giving them care so that they are protected from life. We are reluctant to allow people to make mistakes, to take risks, particularly our own children. Harvey Stevens of Wisconsin has a lovely way of looking at handicapped people; he says that everybody is dependent at certain times. Every newborn infant is totally dependent and so is every senile person. A 14-year-old boy who is emotionally disturbed is very dependent from about five o'clock in the afternoon until bedtime. No one is totally independent. Because a person is handicapped and receives money from the public trough, it does not follow that you may then remove him from the mainstream of society and segregate him to care for him. It always intrigues me to talk to people who have a large investment in the institution system and to hear them strongly justifying and defending that system; and it has occurred to me that the purpose of eating is not to keep cooks employed.

Normalization is a progressive concept. What then are the barriers to progress? The first barrier is the volunteer agencies themselves. They tend to be fragmented; they compete; they go to the same sources for the same monies to give to the same people. The blind have done very well. I am amazed at how well financially and attitudinally a society conceptualizes them as "good people" while the view of other handicapped persons is not always as generous. Another group of people who are barriers to progress are parents. I am one myself. We have a 20-year-old retarded girl, and we tend to be protective and not very good at allowing her the dignity of decision-making and risk-taking. Something appears to happen when a parent has a damaged child. A certain amount of guilt is internalized, and you tend to protect the child so that you can continue to keep him a child, which becomes a way of assuaging guilt feelings. In the retarded children's movement the parents are more geared to giving care than they are to the giving of independence.

There is another group of people whom I consider barriers to progress, and they are the decision-makers. There is the classic, the blocker who comes through as the epitome of responsibility. He and his kind are the villains; they have the bank-trust-officer syndrome. (When I talk to a banking group, I call it an AMA syndrome.) What this really means is that it is a lot safer not to make any mistakes and then

you are not responsible for something not happening. But you are responsible if things you initiate go wrong! Actually, it is a lack of imagination and a lack of guts.

The fourth group blocking progress--and I left this one for the last--are the professionals. Bob Bradfield started to touch on this; I agree with him that children do not fail. If a patient fails to respond, it is not altogether his fault; if a child does not learn, it is not only the child's fault. It is interesting that if you take a five-year-old to France and let him play in the street, he will learn to speak French. Then consider how difficult it is to teach high school teen-agers French; we really have a very low incidence of French-learning success in our high schools. If you leave them alone, they will learn. Doesn't that give you some misgivings about our teaching techniques? The professionals are locked into certain ways of thinking, and they are the extensions of the tools that they use. The psychiatrists, who for some strange reason seem to be mostly liberals in the articulation of their humanism, very often are reactionaries in their views on service delivery. They wear psychiatric glasses.

All this has a rather interesting effect on the youth. They see these things not as honest mistakes but as hypocrisy, and they hate us for it. I fall into this trap myself because I am a linear, sequential, fragmented specialist, and I cannot help it. What we can all learn from the young is that you can do a lot better if you will put out some antennae and become a little more sensitive.

I want to finish with a classic example of the competition between the mechanical linear mind and the new involving mind and one that relates to handicapped people and to architecture. Two months ago I was invited to a United Cerebral Palsy all-day session as the President of another volunteer agency. There were some architects there from another state who made an architectural presentation. They had been employed by the State Department of Mental Illness and Mental Retardation to help upgrade 23 institutions housing 28,000 people. They had worked with a team of 50 people for two years, and they came up with very sophisticated solutions. Firstly, they had a systematic analysis of how to program the building reconstruction so that they would not have to go to each institution and have endless conferences as to what was needed in the way of facilities. They developed a series of units that would work either for the mentally ill or the mentally retarded. They had wards, hygiene units, dining units, etc., which could be put together in various ways to minimize duplication of effort. Secondly, they had developed a building component system so that these components

could be constructed quickly and somewhat less expensively (although that would depend on volume purchasing).

What they had done was a disaster! It was the right answer to the wrong question. They should not be rebuilding their institutional system; they should be phasing it out. Twenty-eight thousand people in an institutional system are far too many and indicates a disregard for community programs and facilities, not to mention anything resembling normalization. Such architectural planning encourages expansion. As the buildings grow bigger, staff relationship problems increase to where the administrator no longer knows the names of his own staff let alone those of his charges. The design called for 34-bed wards; my kids do not sleep in 34-bed wards. We do not drive machinery to clean the halls in our house. We do not have floor drains in our dayroom. This is not the way people live, and it does not train people to live in the real world. It is analogous to the paradox of taking people involved in criminal action out of society and placing them in a totally artificial authoritarian environment in order to teach them to live in normal society; and we seem surprised that we have a high recidivism rate.

The solutions to problems are sometimes comparatively simple with our great technique and great technology. The identification of problems is something else again. We must use resources as part of the planning process. We should not look to other people's two-dimensional solutions; we must really start to think in terms of what it is we want the society to be like and how what we are doing is going to affect the future of those for whom we have responsibility and commitment.

III. ENHANCING DEVELOPMENT

Chairman: Philip Hatlen
Associate Professor of Education
Department of Special Education
San Francisco State College
San Francisco, California

Early Intervention with Infants

Speaker: Mrs. Mary Ann Newcomb, Director
Parent-Infant Neighborhood Center
San Francisco, California

Summary: The last decade has seen a trend toward early sequential experiences to aid development. Many authorities believe that the potential for influencing and controlling behavior is greater as one works with younger children, even those who are infants. Though most of the infant intervention programs being conducted today are in behalf of "high-risk babies," Mrs. Newcomb spoke particularly of the rationale for early intervention with all infants, including those who are blind.

Mrs. Newcomb discussed the interdisciplinary approach to intervention. As she spoke from the podium to the conferees, a demonstration was being conducted in their midst with blind infants and pre-school children by staff from various centers in the Bay area which have intervention programs. Various techniques were shown which are being used with mentally retarded blind infants and pre-school children to maximize the potential use of intact sense modalities, to stimulate exploration, to increase attention span, and to encourage use of any residual vision and the development of speech and language.

In working with infants who are retarded in development and their parents, Mrs. Newcomb has suggested that the home visitor:

- (1) Determine along with the parents' help the developmental level of the child. Estimate his present level of functioning in motor areas, adaptive behavior, language and personal-social areas. It is at this point that the worker will begin and proceed sequentially to provide the infant with the experiences necessary to attain the next level of development.
- (2) Determine at what level, emotionally, the parents are functioning. This may range all the way from

denial and resentment to complete cooperation and eagerness. "You may not be able to do more initially than to be a sounding board for the parents," said Mrs. Newcomb. Real understanding and acceptance of any program of early intervention will depend upon the worker's effectiveness in being able to care genuinely for the child and his parents at whatever level you find them. It has been observed by people working with infants and young children that the younger the child the greater is the degree of rapport established between the worker and the family.

Mrs. Newcomb stressed the importance of movement and postural patterns beginning with infancy. For example, the demonstrators softly swung two babies in hammocks of blankets and showed how the babies reacted to a change in posture affecting balance. She suggested that parents encourage movement at all levels; for example, the young child should be encouraged to move from one place to another, either by creeping or crawling.

Attention was called to the importance of toys in working with very young children: "At all levels one should expose the baby or young child to different textures, sizes, forms, weights. Toys should be introduced one at a time, allowing the child to explore their properties and characteristics."

As a part of the demonstration with children of pre-school age, models of "home-made" toys and equipment were shown. Most of these involved lights for attracting the attention of the partially seeing child. Again, mention was made of various methods of increasing a child's attention span.

Finally, Mrs. Newcomb related the demonstration to some current learning theories (i.e., Piaget and Sears), emphasizing specific stages of individual development and sequential steps in learning. By working intensely with parents and child at an early age, one is enhancing the child's opportunities for optimal development.

Sequentially Developed Learning Procedures
for the School Age Child*

Speakers: Mrs. Grace Terry, Teacher
Fred Shaffner, Teacher
Frances Blend School
Los Angeles, California

The Frances Blend School, a part of the Los Angeles Public School System, has educational services designed especially for visually handicapped children (from three to eighteen years of age) who function on a retarded level.

Many of the children enrolled have been largely deprived of the motor experiences so necessary to them. The combination of visual impairment, other handicaps, and negative social influences have played havoc with their growth and development. Consequently, when they start school they are only physically able to tolerate sitting still for perhaps one hour a day, two days a week.

After each child has explored the physical education room and become oriented to its equipment, he learns to sit down by the mat and await his turn. Basic movement patterns are taught and a variety of exercises are used to encourage the following of simple directions and the development of new concepts.

One eight-year-old boy is totally blind; when he first came to school, he would not allow his mother to leave. He was not toilet trained; he could not feed himself; his speech consisted largely of verbalisms; he spoke of himself in the third person. He has made a great deal of progress at the school.

One little girl who came to our school last year walked on crutches and would just sit and repeat, "I know how to spell people, P-E-O-P-L-E, people." She would speak in a gruff manner, and if you asked her for her name, she would reply, "It's none of your business." Today she comes to school without her crutches. A special supportive table is used in helping her to strengthen both her legs and her fingers.

Another little girl has been able to accomplish much more than had been anticipated at first. She moves slowly and very often reluctantly; she is able now to carry out a direct command at her own pace.

*An illustrated presentation.

Another pupil enjoyed playing with the toy telephone and eventually learned to dial his own home telephone number. He then was allowed to call his mother on the school telephone. The children become somewhat familiar with coins as a result of their bringing milk and lunch money to school. With the use of a toy cash register, categorization can be taught in a meaningful way and practice provided in finger dexterity.

Almost all of the children can now sit in a group for about 15 or 20 minutes. They enjoy many activity songs. Some children have trouble pointing their index finger; we have found, however, that if they first make a fist, raising the pointing finger is much easier. Sometimes we have to help them to make a fist and lift up the finger for them.

Projects are stressed involving more than one child, with practice in working together and sharing the problems and rewards of overcoming a challenge.

Although the Frances Blend School has many programs, it has only one goal for all of the children it serves: to give each child the means of finding and accepting himself, of caring for himself, and of handling his problems independently.

A Sequentially Developed Curriculum for Each Child

To achieve this goal, each child has a sequentially developed, individual curriculum. Such an approach requires that the teacher carefully evaluate each student's needs and determine how these are to be met. As the child progresses, he must be constantly re-evaluated and the various items in his curriculum weighed; then, as necessary, items are changed, expanded, emphasized, recast, or deleted. The planning must be systematic or else the child is confronted by a hodgepodge of learning situations. As the child learns and progresses, the teacher will get to know him better, be able to chart his progress more accurately, and alter the educational situation in the most suitable way.

The Classroom

To accommodate the many and varied needs of the children, large classrooms are provided. The desks in each are arranged around the perimeter to allow for a large open space in the middle of the room. Having this open area allows the children room for working and playing together, for construction and large projects, and for all kinds of programmed physical activity, including a number of specific exercises designed to help them develop a good self image, body and spatial orientation, coordination, muscle tone, and good

posture and carriage free from undesirable mannerisms. Such physical activity also seems to have a positive effect on the children's studying and on other areas of learning, for example, walking and taking care of their own needs.

Sharing

Quieter activities are carried on at each child's desk, at a large round table in the front of the room, or at a work table. While a child is at his desk, the other children are not permitted to disturb him, and he must in turn be quiet and not tease or disturb others. Since many of these children have trouble relating to others verbally, daily sharing activities are conducted at the round table, and each child must participate at some time during the day.

Group Work

One of the primary goals of instruction is the improvement of the child's ability to relate to others so that group instruction is eventually possible, at least to some extent. Usually this means that two or three children are brought together for remedial instruction and for additional practice in working together.

Home Management Program

A recent innovation at the school is the Home Management Program in which older youngsters (12 to 14 years old) are taught the skills and responsibilities necessary for them to take an active part in the care of their home. The ultimate goal is to make them self-sufficient in maintaining the home and in caring for themselves wherever they live. One of the activities of those in this group was the planting of individual garden plots beside the school for growing vegetables. When the crops were ready, the children harvested, prepared, and sampled all the foods.

Pre-Vocational Skills Program

A program related to home management is the one for the development of pre-vocational skills. Older children not only have the opportunity to learn and practice such skills as folding paper and placing it in an envelope, sealing envelopes, sorting, counting out specific quantities of items, putting material into bags and sealing them, placing rubber bands around specific quantities of items, and putting lids on bottles, but they are also performing a valuable service to the school system. These activities are not "busy work"; they are brought to the school from other departments, thus freeing a school employee for other duties.

Off-Campus Work Experience

Children who are successful in the pre-vocational training and who are at least 16 years old may have the opportunity to work for pay in an off-campus workshop. At this facility, the youngsters continue to receive instruction and are able to learn in a realistic way about the meaning and importance of time cards, punctuality, personal neatness, work routines, and pay checks.

Chairman: Mrs. Nancy Akeson, Home Counselor
Variety Club Blind Babies Foundation
San Francisco, California

A Creative Environment in which to Live and Learn

Speaker: Charles C. Woodcock, Superintendent
Oregon State School for the Blind
Salem, Oregon

Summary: Mr. Woodcock opened his presentation by defining his subject: "When we speak of the word 'environment,' we should always be talking about the emotional climate that is developed when people interact with one another or with their physical environment. Too often we think of the environment as only those physical properties that exist and are observed by us. We need to be concentrating on how all of this ties together into a situation that is conducive to the growth we expect to see taking place as the result of our programming to meet established goals.

"In a school situation in particular we too often think of those aspects of the program that take place in the classroom and ignore the fact that each individual coming into that room brings with him previous experiences, some of which may have had such an impact on his life that he is not ready or capable of seeing the tasks that we have prescribed for him.

"The creating of the learning environment is perhaps the most important task of a program administrator."

Two films showing the daily experiences of multiply handicapped blind children in the Oregon State School for the Blind supported the above comments.

IV. DIRECT SERVICES

Chairman: Gordon Christian, ACSW
Southwest Regional Representative
National Association for Retarded Children
Burlingame, California

Specialized Programming for Institutionalized Retarded Blind Persons

Speaker: Mrs. Jeanne M. Huffman, R.N.*
State Consultant, Blind Programs
Department of Mental Hygiene
Sacramento, California

In California, the mildly and moderately retarded are being cared for in the community at an increasing rate each year. As the trend of hospital admissions progresses toward the more severely retarded, multi-handicapped residents, the state facilities must meet the challenge of becoming a training and therapeutic center. As of February 1970, there were over one thousand retarded blind individuals in California state hospitals for the mentally retarded. This figure does not include the retarded blind persons in the mentally ill facilities which have units for the mentally retarded.

Historical Background

Although several state hospitals at one time or another had received some form of federal support through Title I funds or Public Health Service grant monies to establish pilot programs for a selected few retarded blind residents, no specific twenty-four hour coordinated, multi-disciplinary programs were maintained upon termination of federal support.

Throughout the state hospitals, the withdrawn, apprehensive blind residents were scattered and often isolated on numerous wards with their active sighted peers. The general ward chaos and their fear of the unknown made it difficult for these individuals to cope with their environment and participate in programs developed for the sighted population. In addition to severe retardation, blind persons exhibited a wide range of emotional, behavioral and physical problems: lack of mobility and orientation skills, poor coordination and ambulation, total dependency on staff to meet all their basic needs in self-care, unacceptable social and behavioral traits.

*Opinions expressed are those of the author and not necessarily the policy of the Department of Mental Hygiene.

The majority of retarded blind residents isolated themselves from any external stimuli. They were content with their own little world of safety and fantasy and would sit passively in knee-chest positions, either in chairs or on the floor, often engaged in erotic and ritualistic mannerisms, shutting out the world of reality surrounding them. Many displayed frequent temper tantrums and were abusive to themselves and others. Their bizarre and inappropriate behavior nurtured the erroneous belief that the retarded blind were totally incapable of being trained to meet their own needs in self-care activities and could not benefit from nor comprehend the various recreational activities and daily living skill programs developed for their sighted peers.

There were few, if any, specific programs designed to meet their unique needs; treatment staff were not trained to work with the blind; there was no coordination of approaches and goals between education, nursing and other disciplines; and there was the ever present shortage of staff. In reality, due to their multi-handicaps, retarded blind persons were being penalized and denied the opportunity for growth and development.

Lanterman Mentally Retarded Services Act

In 1970, the Department of Mental Hygiene was in the process of a statewide hospital reorganization as required by the Lanterman Mentally Retarded Services Act (AB 225)* in developing a long-term comprehensive plan for the mentally retarded. AB 225 was enacted by the California Legislature in 1969 and signed by Governor Reagan to become effective in July 1971. The passage of AB 225 affirms the responsibility of California to "Meet the needs of each retarded person regardless of age or degree of handicap and at each stage of life's development." It is a system of care for the mentally retarded, whereby regional centers are established to provide diagnostic services and counseling and are service centers for mentally retarded persons and their families.

The Act is a new statewide approach to planning, funding, and organizing the delivery of services for the retarded. With the statewide reorganization in state facilities, each hospital has a number of specific programs which have a distinct, defined treatment objective for patients with like treatment needs, and eliminates or reduces many of the present problems.

*See resume of the Act, Appendix A.

Program Development Role

In 1970, due to the increasing numbers of retarded blind in state facilities, the Department of Mental Hygiene, Bureau of Training, created a position to stimulate an interest among treatment staff in developing coordinated programs geared to meet the specific needs of the retarded blind residents.

As a consultant, I visited state hospitals to observe current programming for the retarded blind. It was immediately apparent that the specific needs of the institutionalized, fearful, blind residents were not being met, and in addition, the blind persons were misplaced in programs. My first task was to help the administration identify and locate retarded blind persons and assess their functional limitations. Meetings with hospital administration and multi-disciplinary staff resulted in three hospitals implementing programs for the retarded blind.

Staff In-Service Training

In-service training was essential for all treatment staff since it was evident that they were unaware of the importance and significance of interacting and relating with the blind residents to establish favorable rapport so necessary to provide security for the resident; staff also lacked the special techniques necessary in working with retarded blind persons. Each hospital also required assistance in identifying and acquiring the specialized equipment to meet the needs of the blind patients.*

New techniques were utilized to train staff; video tape was used to enable staff to observe methodology in working with the blind resident and served as a self-evaluation tool. A documentary was produced to help personnel gain insight into their indifference and lack of enthusiasm. Training tapes to teach staff special skills in working with blind people are in the process of being made. Personnel experienced "simulated blindness" by wearing night shades and actively participating in numerous tasks that are expected of their residents without orientation. Staff quickly learned why residents feared moving without correct mobility and orientation techniques, and how easily one could become disoriented regarding position in space and eating without sight.

*See Equipment Suggestions, Appendix B.

Working with the staff in various activities helped them to realize the retarded blind residents are as capable as the sighted retarded. With support, guidance and reassurance from the hospital administration, personnel discovered their work was challenging and interesting and became avid in their enthusiasm.

One major problem was encountered at each hospital; as group leaders became confident and skilled in working with their blind residents, they were transferred to other units where their newly acquired specialized skills could not be used. With the reorganization of state hospitals, this problem will hopefully be eliminated.

Conclusion

I have found my work challenging and very rewarding because upon each hospital visit, I can see the progress that has been made by each resident: many are able to feed themselves, spontaneous moving about has replaced their fear and apprehension in movement, many residents can now dress themselves, and make their toilet needs known to the staff; temper tantrums are decreasing and behavior has improved, they are more capable in play activities. Tremendous strides have been made by all residents despite the advanced age (16 to 25) of many of these residents.

Often I ponder how many of these youngsters would have needed to be in an institution, if they had been given the appropriate training and opportunities to experience different activities and environments at a much earlier age. There are many retarded blind persons who fit neither in state hospitals for mentally retarded nor in the currently limited available community facilities, where staff is both unaware and untrained to meet their specialized needs. We must all work together, plan together, share and evaluate our techniques and become actively involved in a united effort to develop new resources for this unique group that will provide the essential opportunity for their growth and development.

APPENDIX

A. The Lanterman Mentally Retarded Services Act (AB 225) assigns specific responsibility for provision of services to the mentally retarded and their families to appointed regional boards and to the state. The regional boards plan for and provide the needed local services while the state handles statewide planning and financial coordination. The Lanterman Act seeks to join fragmented services,

eliminate duplicated services, and provide services where none exists so that a parent may find help for a child at the earliest possible moment that mental retardation is suggested. The regional diagnostic, evaluation and service centers for mentally retarded persons are a key element of the Act.

B. Equipment Suggestions

Audi-ball
Balance board (converts into balance beam)
Balls (various sizes and textures); Hippity Hop Ball
Barrels (for rolling and crawling through)
Bean bags and large targets
Bicycle pump
Blocks (large)
Cardboard boxes (all sizes)
Chinning bar
Clown punching bag
Color stacking disks
Dishpan or tub (large enough to sit in)
Giant magnifying glass
Glider swing (for four)
Goal locator
Gym mats
Inner tubes
Jump rope
Jumble peg boards
Jumble stringing beads
Jungle gym
Ladder (type lays flat)
Luggage cart
Mattress (for walking)
Musical toys
Packing crates
Parallel bars
Phonograph
Piano
Plastic containers (various sizes)
Platform truck or dolly
Port-A-Pit equipment
Pounding bench
Puppets (hand)
Puzzles, simple (raised pieces)
Rocking chairs
Rocking horse, rocking boat
Rope swing with tire
See-saw
Skates, roller
Sled

Slide
Steps and stairs
Snap and play beads
Swings
Spring-o-lene (jumping board)
Tandem bicycle
Teeter-totter
Tricycle (pediatric and adult)
Tri-color viewer
Tumbling mat, tires, trampoline
Trampoline (large inner tube with canvas covering)
Wading and/or swimming pool
Water bed
Wooden beads and laces

The Development of Perceptual-Motor Abilities
in Blind Children and Adolescents*

Speaker: Bryant J. Cratty, Ed.D., Director
Perceptual-Motor Learning Laboratory
Department of Physical Education
University of California
Los Angeles, California

It is important to attempt first to define some of the terms contained in the title of this article. The word perception has many meanings and to examine even some of them now is beyond the scope of this paper. Fortunately, the hyphenated term perceptual-motor has a more limited meaning. It is usually an adjective applied to a movement task whose execution is heavily dependent upon the accuracy with which the performer organizes incoming sensory information. With reference to blind children, perceptual-motor behavior may refer to their efforts to learn by manually inspecting various components of their environment or, in a broader context, to movements which enable them to judge their ever-changing position in space while walking.

The phrase "blind children and youth" also needs some explanation. An authority on blindness has recently suggested that

*The concepts presented by Dr. Cratty have been stated in a previously published paper: Cratty, Bryant J., Peterson, Carl, Harris, Janet, and Schoner, Robert, "The Development of Perceptual-Motor Abilities in Blind Children and Adolescents," The New Outlook for the Blind, April 1968, No. 4, Vol. 62, pp. 111-117.

blind must be considered in the plural. He states that one must differentiate between the congenitally blind, blind from birth, and those who have become blind through some kind of disease or accident, the adventitiously blinded. This same author also presents a second dichotomy with which to classify the blind--the rehabilitated blind versus those who have not come to terms with their affliction.²

We will focus our attention primarily upon the judgments important to the blind while they walk. Most of the children and youth who have been our subjects are relatively well-adjusted, intelligent, and are congenitally blind.

For several years prior to our work with the blind, we conducted basic investigations of human performance and learning in which the sighted subjects' vision was frequently eliminated by blindfolding them in order to better control sensory input. It became apparent while working on these studies that some of the information we were obtaining could have practical significance for the blind. Three years ago we initiated a five-year program in which we hoped to determine some of the variables which contribute to the accurate mobility of the sightless.

It is extremely difficult for the sighted to place themselves within the reference system employed by the person who has never had vision. While the congenitally blind are frequently heard to utter "sighted" terms such as "red" and "shiny," it is doubtful whether these words are anything but interesting adjectives applied to certain nouns. If queried about his conception of color, for example, the sightless child will sometimes say, "The sky is blue, the grass is green, but the colors are sighted terms."

Unless presented with increasingly complex objects to inspect manually, the blind child may fall intellectually behind the sighted child. Particular difficulty may be noted as the blind child attempts to grasp concepts related to space.

Just as it is difficult to understand the blind, it is not until the age of four or five that many blind children begin to realize that other children are different from them in an important way. A pair of blind twins was recently reported by their mother as first realizing that there was something different about her sensory system when they failed to "hide" from her, as they could from each other, by becoming silent. In another report regarding the age of this discovery, a blind girl was seven before she perceived that she was somehow different, when she discovered that her mother was able to identify a friend in a nearby car.¹³

There are basic philosophical and practical questions which arise, or should arise, when educational and recreational programs are designed for blind children. Should they be treated simply as sighted children who cannot see, or are there basic perceptual, intellectual, and emotional differences to be considered in their make-up? For example, it is usually believed desirable to eliminate "blindisms" evidenced by congenitally blind children. These rocking movements and other rhythmic motoric behavior are used when the blind child engages in apparently pleasurable self-stimulation. To the sighted, however, this kind of behavior is unpleasant to observe and, as it is usually felt that its continuance will impede the blind child socially, it is usually trained "out" of him--but to be replaced by what?

From scientific and semi-scientific writings concerning these and other questions, various spurious assumptions have arisen during the past years. Some of these have been put to chase by research while others persist.

For example, the fabled obstacle sense of the blind has been reasonably well documented as having its genesis in reflected auditory cues. The more recent suggestion in popular magazines that there are certain blind people who can judge color through their fingertips is another example. We had brief contact with this fable three years ago when we were asked to design a proposal to determine whether the tactile perception of color was possible. A review of the literature on the manual perception of roughness and of heat brought us to the conclusion, prior to beginning the study, that the identification of colors through the fingertips was impossible. Fortunately the research was never consummated, for the senior author also learned at about the same time from two Russian psychologists that the Russian woman who claimed to possess this magical power later admitted to looking under her blindfold!

Intelligent congenitally blind children often possess abilities which are remarkably uneven in nature when compared to attributes evidenced by the sighted. For example, they frequently exhibit extensive vocabularies, but are not really sure of the nature of a traffic intersection. They may be able to read braille but have great difficulty signing their name in script. A study comparing a blind and sighted identical pair of twins recently completed in our laboratory revealed that, despite the blind girl's high intellect, she had only a vague concept of the human face, she could not throw or run accurately, and when asked to draw "her favorite thing" could only inscribe a vague outline of her pet parakeet.¹²

Overall educational programs for blind children seem reasonably adequate during the middle years of childhood. Blind children enter school at about the age of five and learn braille as well as other traditional subjects. By the age of thirteen they can read and write braille adequately and usually graduate to junior high school to continue their studies.

The more marked deficiencies in the total educational program for blind children are in two areas: (a) pre-primary preparation for the complexities of classroom learning, and (b) preparation which will enable them to become mobile and self-sufficient in their environment during and after school years.

A review of the literature relating to data upon which these mobility training programs were established led us to the conclusion that in most cases they employed techniques which were unsupported by objective evidence. The tendency for the blind to veer, for example, while frequently observed, had not been measured. While investigators had studied the ability of rats to perceive gradient changes without vision, no effort had been made to evaluate this ability on the part of humans without sight.

It is with these considerations in mind that our research program was initiated. During the first year, we obtained basic normative data, and from this constructed a mobility orientation test. This test measures an individual's ability to detect gradients and to walk straight without vision. Norms were compiled by assessing others similar in age. During the second year of the investigation we have attempted to ascertain the effects of brief practice upon various perceptual attributes. During the next three years, if our support continues, we intend to explore the effect of auditory cues upon the accurate mobility of blind children, youth, and adults. During the initial year of this investigation about 180 subjects were utilized, including forty-five children and youths from the ages of eight to nineteen. During the second year of the investigation we employed fewer subjects, but detained them for two days during which various kinds of tests were administered.

The following results were obtained when these data were analyzed:

- (1) The direction a blind individual will veer in the absence of auditory cues is predictable and amounts to about 36° of angular rotation per 100 feet of forward progress, or about 1.25 inches of deviation per stride.

- (2) The blind are more sensitive to incline than to decline, or to left-right tilt in their walking surfaces.
- (3) Postural abnormalities, as evidenced by head torsion or tilt, and hand and leg dominance, as well as structural differences in leg length are not predictive of the direction nor of the amount of veer the blind will evidence.
- (4) Highly anxious blind individuals will walk significantly slower and will veer about twice as much while walking 100 feet as will the more relaxed blind person.
- (5) The blind will tend to be more sensitive to the slight curvature in pathways walked when it is opposite to the direction of their usual tendency to veer.
- (6) Congenitally blind adolescents will be more sensitive to gradients walked and will veer less than will the older adventitiously blinded. The former, however, will frequently give evidence of a lack of left-right discrimination in their spatial field, unlike the latter who have spent the majority of their lives with sight.
- (7) The longer an individual has been blind the less he will tend to veer, and the more accurately he can detect gradients.
- (8) The amount a blind individual will veer can be significantly reduced by permitting him to tactually inspect flexible wires indicating the amount and direction he veers.
- (9) The blind will usually overturn 90° turns and underturn 180° and 360° turns when asked to do so in the absence of auditory cues. Training can correct this error by about 50 percent.
- (10) A curb must have a radius of five feet before a blind individual can successfully detect its curvature, using the presently advocated cane techniques designed for this purpose.

It is believed that our findings might encourage mobility trainers to examine more closely some of their traditional practices, and will also tend to facilitate communication between the blind and the sighted by aiding each to better understand the reference system of the other. For example, it was found that while the sighted can easily detect horizontal deviations in the direction a blind individual is taking while attempting to walk a straight line, the blind

are many times more sensitive to gradient changes than are the sighted who are visually inspecting the same surfaces. Similarly the curvature of curbs, which are obviously curved when the sighted inspect them, are difficult, if not impossible, for the blind to detect by employing the cane techniques presently advocated by mobility trainers.

While mobility trainers have at times placed heel lifts under the leg toward which the blind trainee veers, our findings suggest in several ways that the veering tendency is caused by some kind of perceptual distortion, rather than by structure. The blind, as well as the sighted, walk their legs, their legs do not walk them! A most interesting finding is that the direction an individual will habitually veer on the field can be predicted to a moderate degree by asking him to draw a "straight" line directly away from the center of his body while seated at a table.

Further evidence, which has important implications for the perceptual-motor development and training of blind children, was gained when blind children were asked to walk through the curved twenty foot pathways with radii ranging from twelve to forty-two feet. Sixty percent of the responses obtained from congenitally blind children were inaccurate, whereas the adventitiously blinded were usually correct in their judgments of these pathways. Although the congenitally blind were more accurate than the adventitiously blinded when walking straight and when judging gradients, one might conclude that the congenitally blind children did not have an accurate concept of laterality firmly established. Their ability to differentiate between left and right was extremely poor.

Most child development experts suggest that the child's basic perceptions of his body, including an awareness of its surfaces, as well as perception of the differences in the sides of the body, are formed early. By the age of six, it is usually suggested, the child's laterality as evidenced by hand-use is well established. It was apparent from our data that laterality was apparently not as well established in the congenitally blind.

These kinds of data suggest that in addition to an orderly presentation of increasingly complex objects for manual inspection, the congenitally blind child should be given training rather early in life designed to heighten his awareness of his body parts. Probably such training should accompany, and may enhance, the development of speech.

As soon as possible the infant should be made aware of his front and back, parts of his face and the location and name of his limbs. Furthermore, he should, in every possible way,

be given tasks designed to enable him to understand various left-right concepts--that left and right directions change as he moves and that an individual facing him has a different left and right than he does. At the same time, the child should be made to understand that his left arm and leg emerge from the left side of his body, and he should be given tasks which enable him to locate himself relative to various objects. For example, using a box, various drills may be utilized which might help him to understand how to stand with his back, his front, his left side, and his right side nearest an object. If we are to believe the writings of Piaget regarding the importance of the sensory-motor period in the development of an infant and the sensory-tonic theory of perception advanced by Werner, it would seem that this kind of "body image" training is imperative for the child who has no opportunity to pair vision with movement.^{9, 11}

To further explore the educability of blind children in basic perceptual judgments, an eight week training program was conducted from January to March 1967 at the Frances Blend School in Los Angeles.⁴ Thirty blind children from the age of seven to fourteen years participated. It was hypothesized that practice in (a) correcting veer and in (b) facing movements would result in significant improvement in the ability of blind children to relocate their positions in space. The position relocation task consisted of attempting to reach a starting point after being led along the two legs of a right triangle. The hypotenuse was twenty-two feet. A group of control subjects matched according to age and I.Q. at the Foundation for the Junior Blind in Los Angeles were subjected to the same pre and post test conditions, but with no training given.

Results of the study were most encouraging. For the children at the Blend School the average amount of veer at fifty feet before training was fifteen feet. After training the average veer was eight and one-half feet. This indicated a 42 percent improvement after training. In relation to facing movement, the average error was again calculated. The average error for 90° turns before training was 22°. After training this was reduced to 11°. The average error for 180° turns before training was also 22° compared to 13° after training. And the average error for 360° turns before training was 42° compared with an average error of 22° after training. An overall improvement of approximately 50 percent was demonstrated by the children in facing movement accuracy. Finally a mean error of twenty-six feet in position relocation was noted before training. The mean error after training was nineteen

and one-half feet. This indicated a 24 percent increase in performance. All of these training effects were statistically significant. Further analysis of the data, comparing the scores of the children under ten years old in the experimental group with those over ten years old resulted in the finding that both groups evidenced comparable improvement in the tasks trained for (correcting veer and facing movements) and in the task to which positive transfer was elicited (positive relocation).

More important than the statistical implications of this study are the practical ones. Responses from their teachers indicated that the blind child's concepts of left and right were enhanced through the training in facing movements. It was observed by the teachers that this improvement in laterality and directionality has not only physical but also intellectual implications. The academic curriculum in geography is an example, i.e., understanding longitude and latitude. After the experiment was completed, some of the children were also seen to walk to the training areas on their own and to engage in facing movement practice, correcting themselves by feeling the tapes with their toes. The positive results further re-emphasize the importance of sound pre-mobility programs in improving the blind child's basic perceptual judgments that assist his later mobility and orientation within the world.

Auditory training, as outlined in the research by Norton, can also be employed early in the life of the child.⁶ Sounds can be paired with objects and with specific rooms in the home. At the same time, sounds can be utilized to heighten the child's spatial orientation by placing them at various angles around him. Our intention during the next three years is, with the help of people in the departments of psychology and otology, to investigate the manner in which stable and moving sound cues contribute to and detract from the child's ability to move accurately, to detect obstacles, and to deal with his environment in other ways.

It is thus believed that three basic improvements are needed in the educational programs for blind children: early, thorough, and systematic tactile training using objects of various degrees of complexity; systematic "body image" training affording the blind child a better concept of his body, its location relative to objects, its parts, and its left-right dimensions; and a program of mobility education starting as soon as the child begins to walk. It is believed that through this three-pronged effort, more blind children will arrive at schools emotionally prepared to participate in formal programs of education, and will emerge from school intellectually prepared to make meaningful contributions to themselves and to society.

Bibliography

1. Burlingham, D. "Some Notes on the Development of the Blind," Psychoanalytic Study of the Child, 16, 121.
2. Carroll, Rev. Thomas J. Blindness, Little Brown and Company, Boston, 1961.
3. Cratty, Bryant J. "Perceptual Thresholds of Non-Visual Locomotion, Part I--The Veering Tendency, the Perception of Gradient, and of Curvature in Pathways: Inter-Relationships, Norms, Inter-Group Comparison, and a Mobility Orientation Test," Monograph, Department of Physical Education, University of California at Los Angeles, 1965.
4. Cratty, Bryant J., and Peterson, Carl. The Educability of Blind Children in Spatial Orientations, unpublished paper.
5. Cratty, Bryant J., Williams, Harriet G. "Perceptual Thresholds of Non-Visual Locomotion, Part II--The Effects of Brief Practice upon Veer, upon Accuracy of Facing Movements, and upon Position Re-Location: The Perception of Lateral Tilt in Pathways Walked and of Curvature of Curbs; the Relationship of Accuracy of Performance in Selected Table-Top Drawing Tasks to the Veering Tendency and to Position Re-Location," Monograph, Department of Physical Education, University of California at Los Angeles, 1966.
6. Norton, Fay-Tyler M. "Training Hearing to Greater Usefulness," Manual, Cleveland Society for the Blind, 1960.
7. Parmelee, Arthur H., Jr. "Developmental Studies of Blind Children: I," The New Outlook for the Blind, pp. 177-179, 1966.
8. Parmelee, H.A., Fiske, C.E., Wright, R.H. "The Development of Ten Children with Blindness as a result of Retro-lental Fibroplasia," A.M.A. Journal of Diseases of Children, 98, p. 198, 1959.
9. Piaget, Jean. The Construction of Reality in the Child, Basic Books, Inc., New York, 1954.
10. Shilling, C.W. Identification and Teaching of Auditory Cues for Traveling in the Blind, C.W. Shilling Auditory Research Center, Inc., Groton, Connecticut, 1963.
11. Werner, H., Wapner, W. "Sensory-Tonic Field Theory of Perception," J. Personal, 18, 88-107, 1949.

12. Williams, Harriet G., Beane, Virginia. "A Comparison of Selected Behaviors of a Pair of Identical Twins, One Blind from Birth," unpublished paper.
13. Wolff, Peter. "Developmental Studies of Blind Children: II," The New Outlook for the Blind, June 1966.

Normalization for the Retarded Blind Person
and Habilitation for A Life's Work

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For a number of years now I have been deeply troubled about those persons who do not fall into a categorization system. Our system serves children who meet certain labels--we have separate programs for the blind, the mentally retarded, the deaf, the cerebral palsied, those with speech difficulties, but what programs serve the multiply handicapped? Who serves to habilitate the child who is both blind and mentally retarded --perhaps deaf and cerebral palsied as well? My concern has increased even more as I have visited residential institutions and have found many blind-retarded youngsters who have been institutionalized since birth or shortly thereafter. How frightening it is for me to consider the power assumed by some staff claiming or saying that a child cannot learn at this early age--that because of his multiple handicap he should not be a part of the community...ever. Ringing in my ears always are Viktor Lowenfeld's powerful words, "We as human beings have no right whatsoever to determine where to stop in our endeavors to use all our power to develop the uppermost potential abilities in each individual."

Further, I venture to say that the ethical standard of a society can be measured by its relationships to handicapped persons. Certainly this was my experience as I had the opportunity to observe the attitudes and services extended retarded blind and all handicapped persons in Scandinavia. Habilitation is a developmental process beginning in the pre-school years, and instead of institutionalization of multiply handicapped infants, they are started on the habilitation process. The Scandinavians realize that it will take years of special services to render these multiply handicapped persons to the work-a-day world, but it is possible and it is economical--and more than that, it is their God-given right as human beings.

The Scandinavian program that I speak of grew out of the normalization legislation of 1954-1968. Concept Normalization affirms that the retarded blind and multiply handicapped individual is a human being and citizen as well as a developmental and adaptive organism.

Very simply, Concept Normalization makes available to the handicapped person, young or old, the same conditions and patterns of every-day life that you and I experience, creating a life style which is as close as possible to the norms and patterns of the mainstream of society.

First of all, that means re-creating the same rhythm and routine of the day. Each of us gets up each morning--eats in one room, sleeps in another. Our services should not relegate any handicapped person to living and eating and sleeping in that same room...to confine him to the same kind of activity day and night. Services should re-create also the same yearly rhythm by providing multiply handicapped blind persons with the opportunity to be in the community where they can feel the change in the seasons. It is hard to teach a concept of time and seasons to a mentally retarded youngster who is seldom out-of-doors and does not experience the quiet of the evening or the falling of leaves.

Normalization also seeks to guarantee to the handicapped child the same developmental life cycle that others experience. As a pre-school age child, he plays with little toys and he learns textures, colors and numbers; and no matter what his mental capacity or handicap, he ought to be guaranteed this same opportunity to learn. As a teenager, he ought to be experiencing the things that teenagers are, and not be treated as though he were a pre-school child just because he has a limited intellectual capacity.

We become like those we are around. If our only models are other multiply handicapped children, if our only experiences are in very sheltered surroundings, we become very different in our actions and life style.

As the Scandinavians looked at the many kinds of services they had been providing, they too realized, as we should, that they had segregated boys from girls and had not provided in any way for the wonderful fellowship that can take place between male and female. Now both sexes participate in leisure-time activities, such as dancing and watching movies and dating.

Lastly, the Scandinavians set out to gain for the handicapped person the same economic standards you and I

experience. In other words, just because we are unfortunate enough to be born with certain physical handicaps or to be mentally retarded, we ought not to be relegated for the rest of our lives to living in poverty--in sub-standard housing--because we are unable to compete in the competitive job market.

In place of the dismal institutional kind of treatment of severely retarded blind persons has come a most exciting vocational program. Besides the developmental guarantee I have just mentioned, legislation provided vocational training in industry. In a number of places industry is required by law to hire handicapped persons on a percentage of their total work force. They provide training through vocational training centers, and then the handicapped persons return to the industry to work--in most cases not in a sheltered workshop, even though their jobs may be those typically done in such a workshop in the United States. The opportunity to eat with non-handicapped employees or to bowl on the industrial team seems to be very important to Scandinavians in this normalization process--and the feeling of worth as a human being comes to those who are handicapped. Even though a person has a job of packaging screws, when he sees that job as a completed product attached to an entire screen door, his satisfactions are different because he sees himself as a part of a project in industry.

Recreational programs after work that integrate blind-retarded and normal young people have been very effective.

Hostels or daily living programs are provided concurrently with vocational training. The goal is to help the handicapped person to live independently. The training facilities are small and re-create living situations found in the community. There are some young people who will always need a semi-supervised living situation, and since it has been the experience of the Scandinavian countries that large institutions tend to counteract the social integration of the mentally retarded person and militate against his individual needs, small homes re-creating a family unit have taken the institution's place. The smaller unit homes have proven to be far more economical. It is just as normal for an adult to live as independently as possible as it is for a child to live with his parents. Thus, society has to provide accommodations as close to normal as possible.

There are those who say, "But Jean Edwards, this is the U.S.A.--not Scandinavia. We have thousands and thousands more people...we are supporting a war in Asia...we are a capitalistic nation...our federal government supports programs which segregate, label, pigeonhold people into

categories...but business will not finance vocational programs for handicapped people, so we must keep our sheltered workshops and our separate programs...something is better than nothing..."

But...Jean Edwards says, "I believe it can happen here as agencies begin to work together...as we pool resources, dare to dream and to put those dreams into action--to change from segregating and pigeonholing our people who are retarded and blind to habilitating them into our day-to-day society and our world of work."

Recreation for Severely Handicapped Persons
in a Community Setting

Speaker: Mrs. Janet Pomeroy
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Over the past 19 years, the Recreation Center for the Handicapped in San Francisco has served approximately 8,000 persons of all ages and with all types of handicaps. In so providing recreation and physical activity within a community setting, we have discovered that there are a certain number of basic principles which are essential in organizing and conducting such services. These are: (1) recreation for handicapped persons is a need and a right, not charity; (2) handicapped persons belong in the community, and as citizens they have a right to their fair share of the programs that are offered; (3) handicapped people are entitled to recreation and a camping program throughout the entire year, not just for a week or two in the summer; (4) the recreation needs and interests of handicapped individuals are the same as those of the non-handicapped, meaning that their participation is voluntary and their voice in planning and evaluating programs is sought; (5) with imaginative adaptations as they are necessary, handicapped people can participate in all types of recreation activities; (6) they can utilize all the regular recreation and leisure facilities that everyone else uses--"special" staff and volunteers are needed, not special facilities; and (7) the goals for recreation are the same--to provide healthful and constructive activities which contribute to the physical, intellectual, social, emotional, and spiritual development of the individual.

Perhaps the most important result of community recreation programs for handicapped persons, in addition to improved learning, mental and physical health, self-realization, and social development, is the preparation of these individuals for integration into other community programs. For example, during a recent seven-year period, the Recreation Center provided services to 650 multiply handicapped children who had not been accepted in any school. By the close of that period, 350 of these children had improved sufficiently in physical, social, emotional, and self-help skills and in general maturation to be enrolled in city schools for the retarded or in special classes in regular schools. Some were even accepted in regular classes. Also during that period, 400 severely retarded young adults and older adults who had recently returned to the community from state institutions were accepted into the Recreation Center program. Of these, 103 progressed to the point in their self-confidence and social and self-help skills that they could "graduate" from the Center into municipal recreation and park programs. In addition, 12 of these individuals found jobs in the community and 10 are serving as "program helpers" in the Center's Work-reaction Program.

As a result of our many years of experience in successfully conducting community recreation programs for severely handicapped and retarded persons, we have learned that there are a number of specific philosophical and practical considerations to which attention must be given. In the following pages, we will try to explain our approach to community recreation programming by discussing: enrollment policy; the basic principles of community recreation; the attitude and leadership of staff; how to conduct a dynamic program; the atmosphere and physical site; the provision of transportation; and financing of the program.

The Recreation Center has maintained a simple and flexible enrollment policy. All children and adults who are in need of the program are eligible. No one is considered too handicapped, too young, or too old, including the bedfast. There are no psychological or other formal diagnostic evaluations required, only the satisfactory completion of an application form by the parent or guardian and a brief medical report from a physician or clinic. The families of clients are also interviewed by the Center's physician, social worker, and recreation supervisor. Because of this policy, the clients of the Center include the profoundly retarded, the physically handicapped, the emotionally disturbed; their specific behavioral problems include hyperactivity, short attention span, communication disorders, general bizarre behavior, distractability, sensitivity to noise, screaming, and self-destructive acts, such as head banging.

There are several reasons that this enrollment policy has been adopted and maintained: (1) severely handicapped and retarded children, like normal children, need early mental, physical, and emotional stimulation, stimulation that their parents are often unable to give (some children are kept in their cribs much too long, up to 12 years of age in some cases); (2) enrollment of such children in the program allows the parents some relief from the constant 24-hour-a-day care of their child and time to devote to other members of their family (hiring help in the home is often impossible); (3) a recreation-nursery school type of program allows the parents to learn more about the care and management of their children; (4) students and other professional workers from the community who are trained in this field have the opportunity to work with severely handicapped infants rather than just adults.

The Center works closely both with state institutions to enroll those severely retarded individuals who have returned or will be returning to the community and with other agencies and municipal departments to integrate as many of these individuals into their programs as possible. There is frequent discussion among the staffs of all these institutions and agencies regarding the progress of individual clients and their chances for integration into regular programs.

In conducting recreation programs for all ages and types of handicapped and retarded individuals and groups, the Center adheres strictly to the basic goals of community recreation, namely, personal fulfillment, democratic human relations, leisure skills and interests, health and fitness, creative expression, and aesthetic appreciation. The planning of activities takes into account the interests, desires, and needs of the individual participants and aims at helping them to progress toward greater degrees of social independence, physical well-being, emotional stability, and intellectual advancement. In addition, the lack of previous opportunities for social relationships and for recreation programs in general is taken into account.

The general objectives of the Recreation Center program are: (1) to provide opportunities for the creative use of leisure time for those handicapped and mentally retarded individuals who are unable to participate in recreational activities with non-handicapped groups; (2) to encourage various means of self-expression through adapted recreation activities and to provide a setting that will encourage satisfying experiences with others of similar background, including members of the opposite sex; (3) to develop the skills and abilities necessary for successful participation in a wide variety of whole-

some recreational activities that are appropriate for each individual's capacities and for his social needs and interests; (4) to provide outdoor education in camping and recreation experiences and to instill a respect for natural resources through the development of outdoor skills; (5) to provide recreation and physical activities which enhance the development of handicapped and retarded persons in terms of coordination, stamina, balance, flexibility, and endurance in general physical health and appearance; (6) to provide a variety of opportunities for investigation and continued application of learning experiences in order to motivate each individual to discover his own latent abilities and potentialities, and encourage him to pursue them outside the program; (7) to provide instruction geared to the needs of clients of all ages who are at various levels of ability in order to give them basic learning experiences that can be carried over into the home, the community, or some kind of employment; and (8) to provide stimulating day activities for children, teen-agers, and young adults who, because of their severe handicaps, are not accepted in any school or training program, and to assist them in preparing for admission to such schools or programs.

In addition to the essential skills and professional qualifications needed in community recreation, recreation leaders must also have a number of special qualities, attitudes and skills, i.e., emotional stability; enthusiasm and a sense of humor; stamina and physical energy; ingenuity, resourcefulness and creativity; exceptional patience, understanding and tact; a capacity for accepting limited or slow progress; a strong commitment to health, physical education and recreation as integral parts of the total educative process; a willingness to experiment with new activities, attitudes and approaches; and a willingness to perform custodial tasks, such as lifting and handling wheelchairs, feeding, assisting with personal functions, and so on. A leader should not become bogged down in the medical or psychological evaluations of participants--such presumed limitations may unnecessarily lower his expectations regarding the individual's abilities and potentialities. This is not to say that there should be no consultations with medical and psychological personnel. Staff of the Recreation Center regularly meet with a psychiatrist, a clinical psychologist, social workers, and a rehabilitation counselor to discuss problems relating to specific participants, both at the time of enrollment and periodically thereafter.

We at the Recreation Center believe that the influence of recreation on learning and development is due not so much to the activities themselves as to the techniques used in conducting them. For example, the leaders use what they

call the "as if" approach in planning the programs; that is, they organize an activity "as if" none of the participants were retarded (the extent of retardation is rarely known anyway). In this way, no artificial barriers are set up between any of the resources available in the community and those individuals who just might be reached through them. This also allows for the valuable interaction between the participants and the non-handicapped persons that are encountered in public parks and playgrounds, museums, planetarium, cable car and bus rides, snow trips to Squaw Valley, visits to farms and Las Vegas, and wilderness camping. Another new concept used at the Recreation Center is the grouping of handicapped and retarded participants according to their chronological ages, compatibility, social level, and individual needs, rather than by their handicaps.

All sorts of vigorous physical activities are encouraged. Because many of the children have been confined their entire lives to beds or chairs, the opportunity to ride "piggy back" or to wrestle with the leader on an indoor mat or in a grassy outdoor area helps to improve their muscle tone and coordination.

The Recreation Center has many visitors (students, social workers, nurses, community business men and women, and professionals from around the nation and overseas), but their presence nearly every day never disrupts the programs or their participants. On the contrary, both the children and adults enjoy seeing people, and in time most of them will approach visitors in a natural and uninhibited manner. They all seem to benefit from such contact with people from all walks of life. These relationships are encouraged and further promote the friendly, cheerful atmosphere that the staff strives to create throughout the Center.

At all times, both children and adults are encouraged to do as much for themselves as possible. The programs provide many such opportunities for practical experiences of all sorts. For the child who cannot feed himself, eating with those who can helps him to develop this skill. Other activities that actually involve the individual in doing something (even just squeezing water out of a sponge or using an egg beater in soap suds) help to develop a longer attention span, greater self-confidence and self-esteem, and increased manipulative skills. Sensory experiences are made a part of every day's activities, rather than being confined to a special class. Participants learn the taste and smell of various fruits and vegetables during the preparation of lunches and dinners at the Center; they learn about textures in creative

dramatics where the dress-up costumes are made of velvet, silk, and other materials. Sensory experience and general awareness are also encouraged during nature walks at the camp site, the beach and the zoo.

In each of the Center's five major program areas (children, teen-agers, young adults, older adults and the homebound), a wide range of indoor and outdoor activities is provided, by and large the same activities that would be available in regular community recreation programs for non-handicapped persons in these age groups. Very briefly, these programs can be characterized as follows:

Children's Programs. There are 72 children in the Monday-through-Friday Day Care Program. Activities for these children, who range in age from 14 months to 14 years, include flag ceremonies; share and tell; blackboard play; singing; dancing; rhythms; storytelling; simple crafts; pottery; kitchen utensil play; outdoor play with swings, slides, tree climbing; swimming and physical fitness; parties; barbecues; day camping; overnight camp-outs; trips and excursions into the community. The Saturday program includes 80 mentally retarded and physically handicapped children who are enrolled in school. Their activities are similar to those of the day care children and include eight weeks of day camping and one week of resident camping in the summer.

Teen-agers' Program. Many of the 98 teen-agers in this program are in school, others have been dropped from school, and some have never been accepted in any school. The program for them consists of after school, evening, all-day, and weekend activities such as rock dancing; guitar playing; singing; beach, pizza, and holiday parties; fishing; bowling; boating; swimming; camping; and physical fitness.

Young Adult Program. Most of the individuals in this program have recently been released from state institutions and placed with "caretaker" foster families. Over the last four years, approximately 300 young adults have joined the program and the current waiting list is 49. These severely retarded and handicapped people attend all-day and evening programs which are held three times a week. Their favorite activities include physical fitness, music appreciation, club groups, personal grooming, cooking, public speaking, rock dancing, bowling, swimming, camping, and trips to museums, baseball games, theaters and restaurants.

Older Adult Programs. A large number of these physically handicapped, but not retarded, individuals come to the Recreation Center from a nearby home for the aged. They enjoy a

wide variety of entertainment, cultural and instructional activities, and excursions of many kinds.

Homebound Recreation. This program, which is conducted by two full-time staff members and an average of five field work students and volunteers, is designed to provide recreational activities to anyone who cannot be transported to the Recreation Center. Some of these persons are merely recovering from surgery, while others are physically or mentally unable to travel or participate in group activities. Through the use of a Center-owned bus, equipment and supplies can be taken to these individuals so that they may participate in table games, arts and crafts, book discussions and reviews, music appreciation, adapted physical fitness exercises, general grooming, and so on. Occasionally the bus is used to transport them on trips and excursions into the neighborhood and community.

While the attitudes and approach of the staff are essential to the creation of a warm and friendly atmosphere, the physical appearance and practicality of the site are also very important. The removal of barriers to free and easy movement and the addition of color and decorations contribute greatly to the kind of use to which a building can be put and to the success of what is attempted there. A relaxing milieu, but one that also provides a variety of sensory stimulation, must be pursued and maintained. We have found also that large open rooms and an emphasis on outdoor activities play a crucial role in the overall developmental progress of children who have been confined in cribs or kept indoors for most of their lives. Highly visible, though perhaps not permanent, improvements in behavior are often produced immediately.

The provision of total transportation in recreation services for severely handicapped and retarded children and adults is a new idea for most agencies. This service, however, is essential to the success of any year-round program of activities. The Center owns and operates 10 buses, all of which have been donated. They are equipped with the necessary straps and harnesses for holding bedfast children and adults and are in operation six days each week from 8:00 a.m. to 11:30 p.m. A full-time transportation foreman and 16 drivers work on day and evening shifts. The drivers are carefully selected not only for their safe driving practices, but also for their special abilities in working with severely retarded and handicapped persons; all must hold a valid chauffeur's license and a Red Cross First Aid Certificate. A transportation aide supervises the children at all times on their trips to and from the Center. All participants are picked up at their homes or schools to attend programs for which they are

scheduled and then returned to their homes. Transportation is also provided for trips and excursions into the community and for all camping programs.

There are at present a wide variety of sources for financing recreation programs in a community setting. Funding is available, for example, under Title IV, Aid to Families with Dependent Children, for programs serving children up to 18 years of age, and under Titles XIV and XVI, Aid to the Totally Disabled, for those over 18. Such funding covers 75 percent of the costs, with the agency supplying the remaining 25 percent in matching funds. Municipal recreation departments can often use their facilities as "in kind" for matching funds. The Recreation Center for the Handicapped is currently receiving matching funds in the form of a subsidy from the San Francisco Recreation and Park Department on a contractual basis. Additional legislation dealing with the mentally retarded, mentally ill, and other handicapped groups also often provides for the funding of service programs. Voluntary agencies and foundations of various types may be approached for special grants. Finally, voluntary contributions can be solicited from the general public. (For further information on this subject, see "Suggested Resources for Financing Community Recreation Programs for the Handicapped and Retarded" by Janet Pomeroy. Recreation Center for the Handicapped, Fleishhacker Pool Building, Great Highway near Sloat Boulevard, San Francisco, California 94132.)

In summary, the term "recreation" implies the process of being re-created in feeling and spirit and generally involves participation in an activity which is satisfying, enjoyable and refreshing to the participant. Recreation is not only a human need, particularly in a society which has a pace such as that of our present one, but it is a right--to be exercised by all persons, including those who may be handicapped. As citizens of a community, handicapped persons have a right to their "fair share" of programs that are offered, with participation on a voluntary basis and with opportunity for assisting in the planning and in the evaluation of programs. It has been demonstrated that handicapped people can participate in all types of recreational activities provided there are imaginative adaptations as may be necessary. Special facilities are not needed as much as staff with special understanding.

It is encouraging that children, youth and young adults who are severely visually handicapped and/or retarded in development are being offered recreational activities that enhance the total development of the individual physically, socially, emotionally, spiritually and intellectually. This presentation

has described the efforts and success of one community. It is hoped that the suggestions offered will be useful in other settings in order that handicapped persons, blind and functioning on a retarded level, may have a variety of recreational experience for enhancement of living.

